



DEPARTMENT of PSYCHOLOGY



17th Annual

L. Starling Reid

**Undergraduate Psychology
Research Conference**

April 21, 2023

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

College of William & Mary

Mary Baldwin University

New York University

Roanoke College

University of Delaware

University of Maryland, College Park

University of North Carolina at Chapel Hill

University of Virginia

Conference Schedule

Location: Newcomb Hall, 3rd Floor

Commonwealth Room

8:30-8:45 Welcoming Remarks: Chris Mazurek, Ph.D.
Director of Undergraduate Studies in Psychology
University of Virginia

8:45-10:15 Oral Presentations I (12-15 minutes each)

- Suryadyuti Baral
- Areebah Shah
- Madelyn Nance
- Marina Hernandez

South Meeting Room

10:30-11:30 Poster Session I

Room 389

11:30-12:30 Lunch Break

South Meeting Room

12:30-1:30 Poster Session II

Commonwealth Room

1:45-3:00 Oral Presentations II (12-15 minutes each)

- Maxwell Tankersley
- Madison Monroe-Mohajerin
- Naomi Nkan

3:20-3:30 Appreciation Remarks: Chris Mazurek, Ph.D.

3:30-4:45 Keynote: Angela Gutchess, Ph.D.
Professor of Psychology, Brandeis University
How do Culture and Age Affect Memory

Oral Presentations
8:45-10:15 AM
Commonwealth Room

Examining dynamic structural equation models for longitudinal co-development

Suryadyuti Baral

University of North Carolina at Chapel Hill

Advisor: Patrick J. Curran, Ph.D.

One of the most challenging tasks in longitudinal research is to model with sufficient validity the unfolding of two correlated behaviors over time, a process sometimes called co-development. Dynamic Structural Equation Model (DSEM) is a novel statistical modeling approach that has recently gained popularity among researchers who try to model co-development of behavior in children. Traditional statistical models have struggled to isolate the lagged reciprocal effects in longitudinal data and DSEM offers a novel solution to this problem. Despite its exciting potential, the stability and replicability of DSEM are yet to be closely examined. The purpose of our study was to empirically investigate DSEM using recently published data to explore its strengths and potential limitations. Our results show that while some of its parameter estimates are stable, others are characterized by substantial variation as a function of seemingly innocuous initial model estimation conditions. Indeed, some parameters fluctuate between significance and non-significance for the same model estimated using the same data. The instability of DSEM estimates poses a serious threat to the internal and external validity of conclusions drawn from its analyses, challenging the reproducibility of findings from applied research. Given the recent focus on the replication crisis in psychology, it is critical to address these issues as the popularity of DSEM in psychological research continues to rise. We investigate several potential solutions to address this problem and offer recommendations of best practice to applied researchers who plan on using DSEM to study multiple psychological constructs as they co-develop over time.

Oral Presentations (8:45-10:15 AM), 1st Presenter

Location: Commonwealth Room

An Investigation of Amygdala Volume and Behavioral Inhibition Association in Infancy

Areebah Shah

University of Maryland, College Park

Advisors: Daniel Pine, Ph.D. and Nathan Fox, Ph.D.

Behavioral inhibition (BI) in infancy is related to an increased risk of anxiety disorders in adulthood (Guyer et al., 2006). While some literature has explored the biological basis of inhibited temperament in adults (Clauss et al., 2014), this relationship is less understood in infants and children. The goal of this presentation is to examine the relationship between BI and amygdala volume in infancy. At four months, subjects ($N = 37$) underwent a magnetic resonance imaging (MRI) scan, after which T1-weighted images were processed using FreeSurfer. Behavioral follow-up visits were conducted while subjects were between 14 months and two years of age. Data from the Toddler Behavioral Assessment Questionnaire (TBAQ) and observational assessments were used to form a composite BI score. Using composite BI as the dependent variable, left and right amygdala volumes as the independent variable, and total intracranial volume and sex as covariates, a linear regression was run. While correlations between BI and right amygdala volume were insignificant ($p > 0.050$), greater BI was significantly associated with larger left amygdala volumes ($p = 0.033$). However, this association did not survive multiple corrections ($p > 0.025$). Further tests on a larger sample indicated a significant relationship between sex and BI, $F(77, N = 79) = 5.295, p = 0.024$, whereby female subjects were found to be more inhibited than male subjects. While this work provides preliminary evidence for relationships between infants' BI and both amygdala volume and sex, further research is required to fully illuminate these relationships.

Oral Presentations (8:45-10:15 AM), 2nd Presenter
Location: Commonwealth Room

Post Ventilation Inflammation and the Effect on Multiscale Entropy: Predicting Neurodevelopmental Outcomes at the Bedside

Madelyn Nance

University of Virginia

Advisor: Meghan Puglia, Ph.D.

Preterm birth affects 1 in 10 infants and confers an increased risk for Autism Spectrum Disorder (ASD).^{1,2} This increased risk can partially be explained by a common complication of premature birth -- hypoxia, or a lack of oxygen in the blood.³ Hypoxia necessitates aggressive ventilation techniques (Positive Pressure Ventilation - PPV) that contribute to neural inflammation through a cascade of inflammatory cytokines.⁴ Inflammation then causes brain injury, which is linked to autism.⁵ My study uses electroencephalography and MSE analysis (a measurement of the variability of neural signals) to quantify the damage done by ventilation. Infants undergo EEG while being held by a caregiver (social resting state) and while lying in a bassinet (non-social resting state). EEG data has been collected from 52 preterm babies in the University of Virginia Neonatal Intensive Care Unit. Of those infants, 44 received some form of PPV. Infants who received PPV at birth had higher average mean entropy levels than infants who were not ventilated at birth. This difference was mainly driven by electrodes in the parietal lobe which is interesting considering this lobe's association between overactivity and increased severity of ASD symptoms. In addition, saliva samples have been collected from 13 infants. Levels of inflammatory cytokines measured in the saliva showed trending higher mean averages for infants treated with PPV in all 21 cytokines analyzed. These results together indicate that EEG and salivary analysis can be useful tools for monitoring infants at the highest risk of neurodevelopmental disability.

Oral Presentations (8:45-10:15 AM), 3rd Presenter
Location: Commonwealth Room

How Fear and Bias Within Police Officers has Contributed to the Death of Individuals with Bipolar and Schizophrenic Disorders

Marina Hernandez

University of Virginia

Advisor: Heather Zelle, Ph.D.

Over the past six years, more calls to the police dealing with bipolar and schizophrenic individuals have ended in the death of someone. Little research has been done to explore the internal biases police officers face when dealing with such stigmatized mental health groups, and how those internal biases affect the likelihood of the officer responding with fear. Since these two factors have not been bridged together yet in the literature, an analysis was completed to help fuel the conversation. The data was collected by using the Washington Post shooting data with the variable positive for mental health from 2015 to 2020, and from these articles, bipolar and schizophrenic victims were looked more into to find common variables between each case. These variables focused on how the officer reacted when told the individual was having a mental health crisis, and if it was more training based or societal; using past events to base the reasoning for shooting. It was overall found that officers, even when trained in how to deal with mental health crises, end up not using their training when dealing with these two subgroups. Fear seemed to come from more of an internal place, with the goal being not to deescalate the situation but rather “save oneself.” Further research is needed to examine how this fear is built and ways to dismantle it in current officers.

Oral Presentations (8:45-10:15 AM), 4th Presenter

Location: Commonwealth Room

Poster Session I
10:30 -11:30 AM
South Meeting Room

Efficiency or Precision? The Effect of Stopping Rules on Trait Level Estimation

Emily E. Andrews

University of Virginia

Advisor: Eric Turkheimer, Ph.D.

Intelligence testing aims to measure individual intelligence by administering and scoring a series of categorical items, which is very time-consuming. On the one hand, taking sufficient time to precisely assess each person's trait level on the latent trait of intelligence and avoid bias in trait-level estimation is essential. However, it's generally not time-effective to administer every item on a test, a problem often solved by implementing stopping rules. The present study aimed to explore the effects of stopping rules on trait estimation in psychological testing. The R programming language was used to simulate 1,000 participants and 32 items, with each participant going through 1,000 test administrations with and without a stopping rule of $n = 5$. Mplus statistical software was then used to produce trait estimates for each participant. Results showed that implementing stopping rules led to an underestimation of participant traits, suggesting the introduction of bias in the estimation process. This bias negatively affected the precision of trait estimates, highlighting a potential trade-off between efficiency and precision in intelligence testing.

Poster Session I, 10:30-11:30 AM

Location: South Meeting Room

Examining Differences in Anxiety by Race and Ethnicity among Breast Cancer Survivors

Issay Barry | Jesus Zarate

University of Virginia

Advisors: Kelly Shaffer, Ph.D. | Philip Chow, Ph.D.

Anxiety is common among breast cancer survivors. Identifying groups of survivors who experience greater anxiety may help direct screening and treatment resources. The aim of this study is to examine if survivors from different racial and ethnic backgrounds report different levels of anxiety. A secondary analysis was conducted using baseline data from 314 breast cancer survivors (age $M=51.58$, $SD=10.58$; 87.2% white; 92.0% non-Hispanic) participating in a clinical trial of a cognitive-behavioral therapy mobile application. Survivors reported anxiety symptoms on the General Anxiety Disorder-7 scale (GAD-7). Levels of anxiety were similar between non-Hispanic white (NHW) participants and participants from other backgrounds (None/Minimal=11.6% vs. 11.8%, respectively; Mild=37.5% vs. 39.2%; Moderate=28.6% vs. 29.4%; Severe=22.4% vs. 19.6%). Independent samples t-tests were used to test whether there were differences in anxiety symptoms. There were no differences in anxiety by race (white $M=10.37$, $SD=5.04$; non-white $M=10.36$, $SD=4.87$; $t(50.47)=0.02$, $p=0.99$, Cohen's $d=0.003$) or ethnicity (non-Hispanic $M=10.37$, $SD=5.05$; Hispanic/Latina $M=10.36$, $SD=4.63$; $t(29.26)=0.01$, $p=0.99$, Cohen's $d=0.002$). A multiple regression model showed no differences in anxiety between NHW participants versus others ($p=0.70$) when controlling for covariates of age (younger participants reported higher anxiety, $p<.001$), education ($p=0.88$), and work status (full-time workers reported less anxiety, $p=.01$). Further research should examine more diverse samples, as the present results are limited by the modest percentages of participants from minoritized racial and ethnic backgrounds. Acknowledging this limitation, findings suggest that younger breast cancer survivors and those not employed full-time, regardless of racial or ethnic background, should be particularly monitored for anxiety.

Poster Session I, 10:30-11:30 AM

Location: South Meeting Room

Who Speaks Up? The Role of Status, Control, Power, and Deservingness

Natalie Baumeister

University of Virginia

Advisors: Jazmin Brown-Iannuzzi, Ph.D. | Stephanie McKee

We were interested in examining whether perceived status affects when people will speak up in situations of minor transgressions. For instance, when a cashier gives the incorrect change or when a barista serves the wrong drink, who is more likely to speak up? To investigate this question, we conducted two studies. In the first study, we used a correlational design to survey participants on a number of variables including status, sense of control, sense of power, sense of deservingness, and speaking up. Regression analysis revealed that status was positively associated with people speaking up. Further, we found that sense of control and sense of power mediated the relationship between status and speaking up. In the second study, we extended the findings of Study 1 by manipulating participants' perception of status. We asked participants to answer survey questions about demographics and spending habits, and then randomly assigned participants to a higher or a lower socioeconomic status compared to others. Although we did not find that status predicted speaking up via regression analyses, we did replicate Study 1 in finding that sense of control and sense of power mediated the relationship between status and speaking up. Taken together, these studies have implications for how inequalities and discrimination can be perpetuated through society. If people who have lower status are less empowered to speak up in these situations, it may be more difficult for them to assert themselves and gain status and opportunities later on in life.

Poster Session I, 10:30-11:30 AM

Location: South Meeting Room

The Impact of Supposed Learning Style and Stimuli Congruency on JOLs

Atlas Carter

Mary Baldwin University

Advisor: Robin Hopkins, Ph.D.

The concept of learning styles, especially based on sensory preferences, is pervasive in educational settings. Yet, there is no empirical evidence that supports the idea that a person learns best when their supposed learning style is used to present information compared to a non-preferred style. Additionally, research suggests that people are not accurate when they attempt to make a judgement about their ability to remember something in the future (i.e., judgements of learning; JOLs). Yet, we make JOLs all the time to determine what we need to continue to study. This experiment investigates whether the notion of learning styles has an impact on JOLs following memory tasks. A learning styles inventory will be provided to participants, who will then be categorized as either an “auditory learner” or a “visual learner” based on the results. Participants will then be given a memorization task, which involves presenting a pair of words in either a visual or auditory format, then estimate the likelihood that the items will be recalled correctly, followed by an attempt to recall the pair of words. We will then conduct a 2 (assigned learning style: auditory learning style vs. visual learning style) x 2 (assigned stimuli: auditory stimuli vs. visual stimuli) between-subjects ANOVA on JOLs and differences between JOLs and actual performance in participants. We anticipate that people will overestimate their memory performance when their stimuli match their supposed learning style. This is problematic because people are using incorrect tools to make decisions about studying.

Poster Session I, 10:30-11:30 AM

Location: South Meeting Room

Access to Behavioral Parent Training for Parents of Children with ADHD: A Simulated Patient Approach

Nicole Quinn Chow

New York University

Advisors: Anil Chacko, Ph.D. | Brittany Matthews, Ed.M.

Behavioral Parent Training (BPT) teaches caregivers how to address their children's emotional and behavioral problems. Despite the demonstrated significant improvements in children's academic and socio-emotional outcomes, only 3 out of 10 parents of children diagnosed with ADHD receive evidence-based BPT. As parents are often the gateway to care for their children, it is critical to investigate the systemic barriers they face during the help-seeking process. Furthermore, the rapid surge of telehealth after the outbreak of COVID-19 has significantly changed the landscape of healthcare. As such, the present study examined whether access to BPT differed due to urbanicity, insurance coverage, seasonality, and types of delivery. With the use of simulated patient approach, research assistants acted as mothers seeking BPT and called clinics to make appointments. Data were collected from a random sample of clinics in New York State at four time points between summer 2021 and spring 2022. Of the 360 attempts, only 12% indicated appointment availability and 3% provided an estimated appointment date. The Chi-square independence tests showed that appointment availability differed significantly between clinics with different levels of urbanicity and wait time differed significantly between school seasons. This study provides important information about mental health disparities for guiding policy changes and improving access to care.

Poster Session I, 10:30-11:30 AM

Location: South Meeting Room

Examining Psychological Correlates of Romantic Satisfaction during the Transition to Parenthood

Anna Sophia Heyse

University of Virginia

Advisors: Robert Emery, Ph.D. | Shannon Savell, Ph.D.

Becoming a parent is an important milestone for many couples, but the transition to parenthood can put a strain on their romantic relationship, with nearly 70% of couples experiencing a sharp decline in romantic satisfaction after the birth of their first child. The COVID-19 pandemic has added new challenges for expectant parents, and there is a pressing need for preventative interventions to strengthen romantic relationships during this period. However, few interventions have been developed and studied in diverse samples with regard to relationship type, sexual orientation, socioeconomic status, and cultural factors such as race and ethnicity. In this pilot study, we examined the psychological factors that contribute to sustained romantic satisfaction during the transition to parenthood. We focused on depression symptoms, communication, and psychological well-being as potential correlates of romantic satisfaction. The study included racially and socioeconomically diverse couples expecting their first child. Our analysis of baseline questionnaire data from both gestational and non-gestational partners revealed that Romantic Satisfaction & Constructive Communication are correlated for expecting parents during the pandemic; therefore, Targeting communication may be helpful for both gestational and non-gestational partners. The findings of this study can inform the development of targeted interventions aimed at supporting couples during the transition to parenthood.

Poster Session I, 10:30-11:30 AM

Location: South Meeting Room

Weightlifting for Women: Evaluating the Effect on Body Image, Intuitive Eating, and Disordered Eating Habits.

Alexandra Hoffman

University of Virginia

Advisors: Robert Emery, Ph.D. | Joseph Meyer, Ph.D.

Research has shown that concerns over weight, negative body image, and disordered eating habits are pervasive among college-aged women. Abundant anecdotal evidence suggests that weightlifting may improve disordered eating habits and body image satisfaction among some women, as improvement can not be achieved without consuming adequate amounts of calories and protein to rebuild muscle tissue. To date, there has been no research to quantitatively test this theory. In this experiment, we will investigate whether weightlifting improves body image and disordered eating over a ten week period. We hypothesize that the students who completed the weightlifting class over the course of the semester will show fewer disordered eating tendencies and report higher body image satisfaction by the end of the period.

We measured 30 students, college-aged (18-22), who completed two separate courses through the university: weightlifting and tennis. Each student completed the same survey twice, once at the beginning of the course, and at the end of the course. The survey consisted of questions about dieting habits, body image satisfaction, exercise habits, and food preoccupation. Using a three by two factorial design and ANCOVA models, we will detect any change in body image satisfaction and disordered eating habits over the ten-week period. We predict that there will be a statistically significant difference between pre and post measures for the weightlifting group as well as between weightlifting and the tennis control group. This study will further the goal to find ways to help women repair their relationship with food and their bodies.

Poster Session I, 10:30-11:30 AM

Location: South Meeting Room

Friendship can Wait: Effects of Social Relationships on Temporal Discounting

Qiyuan Hu

University of Virginia

Advisors: Amrisha Vaish, Ph.D. | Stefen Beeler-Duden, Ph.D.

Human's propensity to form social relationships underlies the success of the species. In the formation and maintenance of these relationships, people frequently accept waiting and time delays instead of assuming immediate reciprocity. However, delays are not desirable as humans are also predisposed to prefer immediate rewards and value future rewards less. This phenomenon where humans subjectively attribute less value to future rewards is defined as temporal discounting. Despite this natural tendency to discount the value of the future, people must demonstrate patience and place more importance on the future to engage in social relationships. However, few studies have explored how social relationships influence temporal discounting. In this study, participants were randomly assigned to think about a close social relationship or an acquaintance, because different levels of interpersonal relationships affect humans differently. Then, participants complete questionnaires about the social relationship followed by a measurement of the temporal discount rate, which captures how much a future reward is devaluated compared to a present value of the same magnitude. We hypothesize that closer relationships would lower the temporal discount rates, attenuating the predisposition to place less value on the future. That is, researchers expect participants in the close social relationship condition to demonstrate a lower temporal discount rate compared to those in the acquaintance condition. This would mean that social relationships may facilitate a greater future orientation. Thus, social relationships might help humans make more rational decisions about the future, perpetuating better planning and self-control.

Poster Session I, 10:30-11:30 AM

Location: South Meeting Room

Emotion Regulation: Advantages of Positive Relationships

Alexander Johansson

University of Virginia

Advisor: Keith Renshaw, Ph.D.

Difficulties with emotion regulation are considered a risk factor for adverse mental health outcomes, including heightened depression and anxiety (Hu et al., 2014). However, the relationship between maladaptive emotion regulation and distress is bidirectional (Dawel et al., 2021; Flores-Kanter et al., 2021). Conversely, positive relationships with others, or secure attachments characterized by closeness, warmth, trust, and generosity, promote adaptive emotion regulation strategies (Cassidy, 1994; Cooper et al., 1998; Burgkart et al., 2022), such as seeking support (Adams et al., 2018). The present study examines the unique contribution of positive relationships with others to difficulties with emotion regulation when accounting for depression, anxiety, and stress, with the expectation that positive relationships with others would predict fewer difficulties with emotion regulation.

A diverse sample of 256 participants (43% White, 24% Asian American, 14% Black, 10% North African or Middle Eastern, 9% Other or Multiracial; 20% Hispanic or Latino; 72% Women, 21% Men, 7% Non-binary or Other) completed the Depression Anxiety Stress Scales – 21 (DASS-21; Lovibond & Lovibond, 1995), Psychological Wellbeing Scale's Positive Relationships with Others subscale (PWB-PRO; Ryff & Keyes, 1995), and the Difficulties with Emotion Regulation Scale (DERS; Gratz and Roemer, 2004).

Three hierarchical multiple regressions of DERS total scores were conducted, with the DASS-21 (1) depression score, (2) anxiety score, and (3) stress score entered in step one, followed by PWB-PRO entered in step two. After controlling for depression ($\beta = .49, p < .001$), PWB-PRO explained 4% variance in DERS scores ($\beta = -.27, p < .001$). After controlling for anxiety ($\beta = .43, p < .001$), PWB-PRO contributed to 10% variance in DERS scores ($\beta = -.35, p < .001$). Finally, after controlling for stress ($\beta = .48, p < .001$), PWB-PRO explained 7% variance in DERS scores ($\beta = -.30, p < .001$).

The findings demonstrate the potential benefit of positive, healthy relationships for emotion regulation, regardless of depression, anxiety, or stress. Through positive relationships with others, a person might seek support and reduce distress through the validation, perspective, or guidance they receive on prompting stressors. Interventions that target relationship functioning, such as those used in interpersonal psychotherapy or dialectical behavior therapy, may help address maladaptive emotion regulation. The results must be interpreted with caution, however, given that the use of cross-sectional data prevents us from examining causation or temporal precedence. Also, an undergraduate sample limits the generalizability of our findings. Future research would benefit from investigating positive relationships as a moderator or a mediator of the relationships between depression, stress, and anxiety with poor emotion regulation using longitudinal data.

Poster Session I, 10:30-11:30 AM

Location: South Meeting Room

Closing the Gap in Autism Research: Methods for Conducting Meaningful Research with Nonspeaking Autistic Participants

Kate Kaufman

University of Virginia

Advisor: Vikram Jaswal, Ph.D.

About one in three autistic people are nonspeaking, meaning that they cannot speak or cannot rely on their minimal speech for communication. Additionally, many nonspeaking people struggle with motor planning and control and, therefore, cannot readily access alternative communication methods. With nonspeaking autistic people's narratives and experiences difficult to access, much remains unknown about them and major gaps remain in understanding their strengths and challenges. It is surprising, then, that only about 11% of autism research targets nonspeaking autistic people. The reasons that nonspeaking autistic people are left out of research are complex, but may in part be rooted in the stereotypes that nonspeaking autistic people are intellectually disabled and unable to participate in research. In reality, nonspeaking autistic people have a wide range of abilities and, with proper accommodations, are capable of participating in a variety of experimental protocols. In this thesis, I will lay out best-practices for doing research with nonspeaking autistic people, as informed by nonspeaking autistic perspectives. Additionally, I will describe one successful experiment that was carried out while using these principles: a study designed to test nonspeaking autistic people's ability to wear an augmented reality device and to interact with virtual objects.

Poster Session I, 10:30-11:30 AM

Location: South Meeting Room

Assessing Attitudes Towards People with Disabilities

Hope Keller

Roanoke College

Advisor: Andrea N. Burchfield, Ph.D.

Disabilities are defined as an impairment of the mind or body that significantly affects activities of daily living. Throughout the world, 26% of the population experiences a form of disability, and often face daily obstacles and barriers (Centers for Disease Control and Prevention). One of the largest barriers individuals with disabilities face is negative attitudes, which include fear, anger, repulsion, and uncomfortableness. These attitudes have stemmed from historical beliefs of individuals with disabilities being considered evil, possessed, and ostracized from society. The Attitudes Towards Disabled Persons scale, which is the most widely used scale to assess attitudes towards disabilities, was created in 1970, and the language has not been updated since then. Therefore, the aim of this study is to first update the ATDP scale to incorporate person-first language. Secondly, I will observe if participants who complete the updated scale also have more positive attitudes towards people with disabilities compared to participants who complete the original scale. If the scale using person-first language yields more positive attitudes, the implications are that it is important to use person-first language in assessments of people with disabilities.

Poster Session I, 10:30-11:30 AM

Location: South Meeting Room

Asian Mother-Infant Interactions and Paid Maternity Leave Policy

Haruka Kokaze

New York University

Advisor: Natalie Brito, Ph.D.

As more people call for a national paid parental leave policy in the United States, attention on research around mother-infant interactions and its influence on mothers' psychological stress and infants' early development has increased (Brito et al., 2022; Lemus et al., 2022). Mother-infant interaction refers to interpersonal and reciprocal exchanges between a mother and her infant that significantly influences infants' neurocognitive, language, social, and motor skill (Hofer, 2006; Rocha et al., 2020). These formative milestones allow infants to explore and understand their surroundings (Centers for Disease Control and Prevention, 2021). Mothers play a key role in children's early development, yet the U.S. is the only high-income developed country that does not have a national paid maternity leave policy implemented (Kozak et al., 2021). To date, there are few studies that investigate how parent-child interactions may differ based on mothers' employer's maternity paid leave policy. There are even fewer studies that involve non-Caucasian families. Given that the U.S. is getting more diverse and there is a lack of research investigating a growing population of Asian mothers, it is crucial to further advocate for the nation to implement a national paid maternity leave policy. It is particularly important to look into Asian mothers because Asians are the fastest growing racial group in the U.S. as of 2021 (Budiman & Ruizte, 2021). Therefore, this research will address the gap by asking: How do the parenting experiences of Asian mothers vary based on their maternal paid leave policy? Participants included 4 mid-thirty years old mothers and their 1-3 years old infants. The sample included employed heterosexual, Asian mothers (50% Japanese, and 50% multiracial/other). Mothers complete a remote survey with questions regarding family demographics, parenting experiences, child behavior, and their stance on their paid maternal leave policy. The survey consisted of 6 open-ended questions, intended to elicit the experience of Asian mothers in regards to their parenting quality in order to understand the impact of the paid maternal leave policy on mother-child bonding. We transcribed these surveys using an emergent coding for caregiver-infant interactions. We coded for specific themes across different mothers separately and then came to an agreement to establish inter-rater reliability. The themes include: positive parenting experiences, negative parenting experiences, satisfaction with the maternity paid leave policy, dissatisfaction with the maternity paid leave policy, awareness of infant's development milestones, existence of social support, and lack of social support. Potential implications include understanding the benefits of implementing a national paid leave policy in order to support caregivers and their infants. Early interventions could be created to decrease psychological stress that new mothers experience. This study could further provide evidence for the necessity of a national paid leave policy and possibly extend to paternity leave to increase father involvement in children's development and provide low-cost childcare options to assist mothers.

Poster Session I, 10:30-11:30 AM

Location: South Meeting Room

Male or Female?: The Effects of Surgical Masks on Young Children's Gender Classification

Jenna Hope Loquercio

University of Delaware

Advisor: Roberta Michnick Golinkoff, Ph.D.

Facial masking due to COVID-19 affected aspects of interpersonal connection and communication (Mheidly et al., 2020; Chester et al., 2022). We ask whether masking the lower half of the face interferes with children's ability to classify another's gender (Brown & Perrett, 1993), and ultimately their development of gender categories (Halim & Ruble, 2010).

Our study explores the impact of masculine, feminine, or androgynous faces on gender classification, and whether children use holistic processing or rely more on certain parts of the face (Fitousi et al., 2021). Fagot and Leinbach (1993) found that 9-month-olds can categorize faces of males and females from pictures. Wild et al. (2000) found that 7-year-olds can classify the gender of adult faces using only internal facial structure. We extend this work to mask-wearing contexts, exploring 3- to 6-year-old's ability to classify the gender of masked and unmasked faces. We hypothesize that face masks will significantly affect children's gender classification.

Children were shown images of Caucasian uncovered faces and faces wearing a surgical mask. The stimuli, borrowed from Ponds et al (2013), varied on a continuum from strongly masculine to strongly feminine faces. Twenty-four of thirty-six participants have completed the task. Preliminary results of a subset of the data suggest that strongly masculine masked faces were correctly perceived 85% of the time, while strongly feminine masked faces were correctly perceived 56% of the time, contradictory to young children's female face preference (Johnson et al., 2021). Further analyses will be conducted when the data set is complete.

Poster Session I, 10:30-11:30 AM

Location: South Meeting Room

Does willingness to talk to strangers predict well-being?

Maddie Mixon

University of Virginia

Advisor: Adrienne Wood, Ph.D.

The present study uses a behavioral game to assess if willingness to socially explore is related to well-being and stress within college. For one week, students utilized a mobile app to complete scavenger hunt missions that involve talking to strangers. Participants also reported institutional belonging and perceived stress pre and post study. We quantified the trait-level tendency to socially explore as the number of missions completed. We tested whether social exploration is positively associated with belongingness and negatively associated with perceived stress. If participants seek novel connections during the game, we suspect they also naturally seek out broader social networks that support integration in the college community and protect against stress. This social exploration scavenger hunt game has the potential to later serve as an intervention to expand social networks and foster well-being among college students.

Poster Session I, 10:30-11:30 AM

Location: South Meeting Room

Analyzing a Biomarker of Emerging Separation Anxiety in Infants

Emily T. Mortman

University of Virginia

Advisor: Meghan H. Puglia, Ph.D.

Infants cry when they are separated from their caregivers from birth, even before they develop their own attachment styles. However, at what point does this cry transition from an expression of discomfort to a genuine expression of attachment style? What parts of the brain are activated when the baby detects that they are no longer being held? At 8 months-of-age, around the time babies start crawling, they also begin to develop “stranger danger” and express more discomfort when they are not being held by people other than their parent or guardian. The current project utilizes a large, ongoing longitudinal study in which infants aged 0-24 months perform a variety of simple tasks while undergoing EEG, including assessing their baseline brain function through resting state conditions when they are held and not held. I will examine longitudinal brain function at 4 months– the age at which attachment style and stranger fear emerges (n to date = 35). I hypothesize that the level of frontal alpha asymmetry– the difference between left and right alpha (5-9 Hz) activity over the frontal lobe- will be a marker of infant distress when transitioning from being held to not held. Specifically, I anticipate more activity in the right frontal lobe, corroborating past research examining expressions of fear. These results will provide insight into the neural factors underlying infant temperament and separation anxiety, and will have implications for our understanding of early-emerging biomarkers of anxiety disorders.

Poster Session I, 10:30-11:30 AM

Location: South Meeting Room

Both Autistic and Non-autistic People Believe that Autistic People Feel More Pain Than Non-autistic People

Chelsea Rodi

University of Virginia

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

Others' beliefs about how sensitive a person is to pain inform how that person is treated when they experience pain, including the likelihood of receiving pain medication and psychosocial support. Research shows that non-autistic people believe that autistic people feel more pain than non-autistic people (Basargekar et al., in prep.). The present study aimed to both replicate these previous findings and determine whether autistic people themselves share this bias in pain sensitivity beliefs. Autistic and non-autistic participants completed scales measuring their beliefs about the intensity of pain they expect themselves and either an autistic or non-autistic target to experience in socially and physically painful scenarios. Autistic and non-autistic people had similar self-pain ratings, but both autistic and non-autistic people believe that autistic people feel more pain than non-autistic people. Additionally, the autistic and non-autistic participants believed that the autistic target had experienced greater life hardship. Non-autistic participants also believed that the autistic target should have less autonomy in making life decisions than the non-autistic target, but autistic participants did not differentiate between the autistic and non-autistic targets in this manner. These data give reason to believe that stereotypes of vulnerability stemming from the infantilization of autistic people could be one mechanism behind this bias.

Poster Session I, 10:30-11:30 AM

Location: South Meeting Room

Poster Session II
12:30-1:30 PM
South Meeting Room

The Role of Maternal Depressive Symptoms in Functional Brain Network Connectivity Among Infants

Sydney Anderson

University of Virginia

Advisor: Tobias Grossmann, Ph.D.

Infant development critically depends upon the social environment, particularly interactions with caregivers. One factor known to alter the early caregiving environment is maternal depression (Lovejoy et al., 2000). Previous studies indicate that maternal depression is associated with individual differences in infant brain development (e.g., Dawson et al. 1997), but its effects on infant functional connectivity (FC) in long-range cortical brain networks such as the default mode network (DMN) and fronto-parietal network (FPN) have not been assessed. The present study ($N=70$) examines whether maternal depressive symptoms relate to infant brain FC in the DMN and FPN. Maternal depressive symptoms were measured at one month and five months postpartum using the Edinburgh Postnatal Depression Scale, and the resting-state FC of each infant was measured at five months of age using functional near-infrared spectroscopy. Maternal depressive symptoms at both timepoints were found to be marginally significant predictors of infant FC in the FPN only, but the direction of these associations differed. Increased maternal depressive symptoms at one month were associated with increased FC at five months ($\beta=.292, p=.091$), whereas increased maternal depressive symptoms at five months were associated with decreased FC at five months ($\beta=-.288, p=.086$). Further, increasing levels of maternal depressive symptoms over the first five months of infant life were associated with decreased FPN FC at five months ($r=.292, p<.05$). These findings suggest that the first five months of life may be a sensitive period for the FPN during which maternal depression may impact development.

Poster Session II, 12:30-1:30 PM

Location: South Meeting Room

When Friendship Works: Linking Adolescent Close Friendship Qualities to Long-term Career Outcomes

Lauren V. Breeden

University of Virginia

Advisors: Joseph P. Allen, Ph.D.

Jessica A. Stern, Ph.D. | Amanda F. Hellwig, M.A.

Although various factors in adolescence have been studied in relation to later career-related outcomes in adulthood, the relationship between adolescent friendship qualities and career outcomes has very rarely been studied. By utilizing multi-informant reports in a longitudinal study design, this study explores the relationship between early adolescent friendships from age 13-15 and adulthood career outcomes in one's 30's. A sample of 184 target participant teens had their closest friend report their perspective on their friendship quality between ages 13-15. Approximately 20 years later, the target participants were surveyed regarding their career satisfaction and feelings of burnout in adulthood. As hypothesized, greater reports of attachment and trust from the target participants' closest friend predicted reports of greater career satisfaction of the target participant in adulthood. Greater reports by the participants' closest friend of the target participant being pressured by others in adolescence was predictive of higher reported feelings of exhaustion by the target participant in adulthood. Additionally, longer friendship duration reported by the teen's closest friend was associated with less overall burnout reported by the target participant, and specifically lower feelings of exhaustion and cynicism in adulthood. These findings suggest an important relationship between adolescent friendship qualities and adulthood career-related outcomes and raise the possibility that a heavier emphasis should be placed on supporting adolescent friendships as a potential predictor of their later career satisfaction and reduced feelings of burnout.

Poster Session II, 12:30-1:30 PM

Location: South Meeting Room

The Effect of Adverse Childhood Experiences on First-Year College Students' Coping Self-Efficacy

Maria Cisneros-Gomez

College of William & Mary

Advisor: Danielle H. Dallaire, Ph.D.

Adverse childhood experiences (ACEs) significantly shape an individual's health in adulthood (Sciaraffa et al., 2017). Studies have demonstrated that coping strategies moderate the relation between ACEs and mental health (Sheffler et al., 2019). Coping self-efficacy (CSE), defined as one's confidence in their ability to use coping strategies (Chesney et al., 2006), has been found to weaken the relation between ACEs and detrimental effects on mental health in college students (Merians et al., 2022). While research has examined the association between overall CSE and ACEs, research investigating CSE with regards to specific coping strategies and ACEs is needed. To address this gap in the literature, this study used Chesney et al.'s (2006) Coping Self-Efficacy Scale to explore how first-year college students' number of self-reported ACEs (Felitti et al., 1998) impact their CSE in regards to three subscales: problem-focused, emotion-focused, and social support coping. We hypothesized that students with a higher number of ACEs would report similar CSE mean scores on the problem-focused and social support subscales. Furthermore, we hypothesized that they would report lower mean scores on the emotion-focused subscale compared to students with lower ACEs scores. As predicted, students with a high number of ACEs reported similar problem-focused and social support CSE scores compared to their peers. Nevertheless, they did not report lower emotion-focused CSE scores. These findings suggest that future ACEs research should focus on the mechanisms that promote resilience in children and adolescents who are disproportionately exposed to a high number of ACEs.

Poster Session II, 12:30-1:30 PM

Location: South Meeting Room

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

Hailey Costello

University of Virginia

Advisors: Amrisha Vaish, Ph.D. | Johanna Chajes, M.A.

An ongoing question within psychological and moral sciences involves the mechanisms that drive fairness and support cooperation in humans. Currently, we know that in adults, fairness is more intuitive than deliberate (Rand et. al, 2012), however it is unclear whether fairness behavior is intuitive in children as well. To assess the intuitive nature of fairness behavior in children ages 4-9 years old (pre-registered n=144), we have designed a novel Modified Dictator computer game where children must choose between a fair or selfish distribution of virtual resources for themselves and another child. The participants are randomly assigned to either a time pressure condition (make a decision within 10 seconds) or time delay condition (make a decision after 10 seconds) when making their choice to measure whether decisions vary between conditions and across age groups. We hypothesize that across ages, children in the time pressure condition will be more likely to choose the fair option compared to those in the time delay condition. Additionally, we hypothesize that older children will be more likely to choose fairly than younger children, regardless of condition. This research will provide further clarity into the nature of fairness behavior throughout childhood, which will help ensure children's developmental needs are being met and adults can scaffold children's cooperative behaviors appropriately.

Poster Session II, 12:30-1:30 PM

Location: South Meeting Room

There's no place like home: A Quantitative Analysis of Fragile Families Data

Catherine N. Henkel

University of Virginia

Advisor: Karen M. Schmidt, Ph.D.

The relationship between home environment and children's behavior has been studied extensively, and its importance cannot be overstated. When a child misbehaves, acts out, or is violent, one of the first natural reactions is to attribute at least some responsibility to the child's parents and family situation. This study aims to explore whether specific characteristics of home environment, parent behaviors, and parent-child relationship are associated with negative adolescent behavior, particularly in physical and verbal forms. The Future of Families & Child Wellbeing Study, formerly called the Fragile Families & Child Wellbeing Study (Reichman et al., 2001), is an ongoing longitudinal study based on a sample intentionally oversampled to include particular groups, such as unmarried, Black, Hispanic, and low-income mothers and families. We studied the sixth wave of data (N=3,146) from the project, collected between 2014 and 2017. During this time period, the original children in the study reached ages 14-19. In order to identify any statistical relationships between home environment and analogous aspects of the children's lives, we performed various quantitative analyses of the data in the R statistical programming environment, including multiple regression, logistic regression, and chi-squared tests. We predicted that less stable home environments and less supportive parent-child relationships would be associated with higher frequencies of negative child behavior in both physical and verbal categories. Our results support this hypothesis for some aspects of home life, but not others. Having a calm house atmosphere and parents hitting their children had the strongest association with the violent behavior. These significant areas of interest are potential subjects for future in-depth research.

Poster Session II, 12:30-1:30 PM

Location: South Meeting Room

Full House or Empty Nest: The Behavioral and Biological Effects of Weaning Age in the Prairie Vole (*Microtus ochrogaster*)

Emmalee Johnson

University of Virginia

Advisor: Allison M. Perkeybile, Ph.D.

Prairie voles are an important model in psychological research because of their distinct prosocial behaviors similar to those of humans. One such behavior, alloparenting (care for young given by non-parents), has been well studied in the prairie vole, but its environmental and neurobiological causes are still mostly unknown. Between prairie voles, there is much variability in the expression of alloparental behaviors. Known differences come from the age and sex of each animal. What contributes to such differences is poorly understood. Prior studies of other rodent models have demonstrated the importance of early life experience, specifically weaning age, on behavioral outcomes in adulthood. In the present study, weaning age was tested as a predictor of alloparental care behaviors in adolescent prairie voles. Using a between-groups design, male and female prairie voles were randomly assigned at birth to be weaned on postnatal day (P)14 (early weaning), P21 (standard), or P28 (late weaning). On P35, all animals were tested using an alloparental care paradigm in which test animals were introduced to a novel pup and observed for care behaviors. Test animals demonstrated significant behavioral differences based on both weaning age and sex. In particular, males weaned at P21 and P28 showed an increase in alloparental behaviors, while non-parental females, regardless of weaning age group, demonstrated a significant increase in anxiety behaviors. Animals weaned at P21 demonstrated the highest number of attacks. Analyses of *Oxtr* gene expression and DNA methylation in the nucleus accumbens was inconclusive in explaining the observed behavioral differences.

Poster Session II, 12:30-1:30 PM

Location: South Meeting Room

Crooked Questionnaires: Investigation of Faking Good on U.Va. Personality Survey Data

Abigail Nichols | Shiqi Wang | Antonio Rosario

University of Virginia

Advisor: Karen Schmidt, Ph.D.

Faking good is defined as a person's intentional adjustment of responses on surveys to cause themselves to be viewed in the desired manner, often in the eyes of an employer during a job interview or doctor during a diagnosis. Questionnaires concerning personality or habits are common in psychological research among being actively used as a hiring method for businesses and sometimes within the school system. Although this system is thought to be a good judge of character by many, it is relatively simple to alter responses and be dishonest to appear socially favorable. This study uses data from 987 subjects between the ages of 18 and 79 who completed an Internet personality survey distributed by the University of Virginia in 2004 which consisted of 52 questions from the five personality constructs: extraversion, agreeableness, openness, conscientiousness, and neuroticism. Using scree plots and factor loadings from exploratory factor analysis, we found that there are seven factors in the data set. From here, we separated each question into the top 70% of responses and bottom 30% of responses and used univariate analysis to compare the occurrence of faking good both within and between factors to test whether those suspected of lying for one group of questions were lying throughout the whole survey to enhance their appearance. Further investigation into patterns within the dataset will include analyzing item difficulties and fit using IRT to investigate fluctuation in the quality of questions with the survey.

Poster Session II, 12:30-1:30 PM

Location: South Meeting Room

Interpersonal Discrimination and Structural Inequality as Determinants of Mental Health

Sally O'Connor

University of Virginia

Advisor: Jazmin Brown-Iannuzzi, Ph.D.

Current research suggests that both structural inequality and interpersonal discrimination are linked to poorer mental and physical health. While the presence of these different factors is known, there is still a lack of research examining their particular effect on mental health and how they relate to one another. To remedy this, we tested for correlational relationships between indicators of structural inequality, interpersonal instances of discrimination, and symptoms of anxiety and depression in a sample of children from low-income, high-risk families in the longitudinal Early Steps Project. Indicators of structural inequality were taken from county-level census data in 2015, when participants were 15. Participants' experiences of interpersonal discrimination were measured at 16, and a latent mental health variable was constructed using symptoms of anxiety and depression recorded at age 19. We expected indices of structural inequality at 15 to positively predict instances of daily interpersonal discrimination at 16. We also expected structural inequality at 15 and interpersonal discrimination at 16 to be positively correlated with symptoms of anxiety and depression at age 19. We did not find solid support for our first hypothesis linking structural inequality and interpersonal discrimination, but we did see some support for our second hypothesis. Perceived interpersonal discrimination was positively correlated with symptoms of anxiety, $r(430) = .25, p < .001$, and depression, $r(422) = .28, p < .001$. Most economic and educational measures of structural inequality followed this same trend, but some population demographics had negative or inconclusive relationships with anxious and depressive symptoms that contradicted our predictions. These findings show a clear relationship between interpersonal discrimination and poorer mental health, and suggest that more research is needed into the role of structural factors in facilitating discriminatory experiences and predicting future mental health concerns.

Poster Session II, 12:30-1:30 PM

Location: South Meeting Room

Influences of Multicultural Background: Crisis of Connection among Chinese Boys in America

Xiaolin Ou

New York University

Advisor: Niobe Way, Ed.D.

Crisis of connection refers to the fact that masculinity norms in American culture have been influencing boys' emotional development, posing challenges for them to remain connected to close relationships as they grow up. While researches have been mainly focusing on boys growing up in American culture, masculinity norms are manifested variously in different cultures, and cultural backgrounds serve as important moderators of how male individuals experience masculinity norms and friendships. This research investigates how boys with multicultural backgrounds approach masculinity norms with regard to their relationships. In qualitative interviews with 3 Chinese male college students who were born and raised in China and attended colleges in the U.S, questions were asked about both their interpersonal relationships and their relationships with both Chinese and American masculinity culture. Qualitative coding analysis of the interviews indicated that when encountering a new culture, cross-cultural experiences tend to influence how boys experience their friendships, and their solution to the crisis of connection in terms of resistance and accommodation to masculinity norms.

Poster Session II, 12:30-1:30 PM

Location: South Meeting Room

Hoos Try mHealth: Examining change in momentary affect following different types of brief training sessions to reduce anxious interpretations

Kaitlyn Petz

University of Virginia

Advisors: Bethany Teachman, Ph.D. | Emma R. Toner, M.A.

Rates of stress and anxiety are alarmingly high in university communities, but most people in need of mental health services do not receive treatment. Mobile health (mHealth) interventions show promise to improve psychological symptoms and increase access to interventions, but little is known about their effects in the moment. The present preregistered study (<https://osf.io/bwh48/>) sought to evaluate the short-term impact of brief mHealth sessions to determine which intervention features are associated with the greatest improvement in momentary affect. Data for the present investigation come from Hoos Think Calmly, a mobile application for the UVA community that uses Cognitive Bias Modification for Interpretations (CBM-I) to shift negative thinking patterns. Participants ($N = 26$ UVA staff members) completed brief sessions 1-2 times daily in the app; sessions varied based on stressor domain selected, format of the training material, and added material to enhance training effects. Linear mixed effects models were used to test whether different features of training sessions (e.g., stressor domain, session format, and post-session recommendation type) are predictive of change in affect from pre- to post-session. Results indicated that, on average, participants' affect did not change over the course of a brief CBM-I session ($M = 0.002$, $SD = 0.77$); participants on average reported feeling somewhat good (5.41 out of 7) both pre- and post-microdose. We found preliminary evidence to suggest that microdoses with non-write-in scenarios (one letter missing, two letters missing) were associated with more positive changes in affect than microdoses with write-in scenarios (fill-in-the-blank, write your own, long scenarios). Microdose stressor domain and post-CBM-I recommendation were not predictive of affect change. Our findings suggest that single doses of CBM-I may not produce immediate changes in affect, perhaps due to the timescale on which affect changes relative to the frequency at which it was measured or because CBM-I exerts its effects cumulatively.

Poster Session II, 12:30-1:30 PM

Location: South Meeting Room

A Psychometric Analysis of the Social Responsiveness Scale

Samantha Remmey

University of Virginia

Advisor: Karen Schmidt, Ph.D.

In recent years, an abundance of research has offered us a highly nuanced and thorough understanding of autism spectrum disorder (ASD). The psychological scales we use to diagnose ASD and capture associated symptomatology must, therefore, be continually analyzed and updated to reflect the most contemporary knowledge. 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 each item allowing for responses ranging from 1- not true, to 4- almost always true, and five subscales for scoring. This study aimed to analyze various psychometric properties of the SRS-2 scale using simulated data. We compared scores across the five subgroups using psychometric tools sensitive to their differences. These analyses can be used to glean insights into the effectiveness of the SRS-2 scale. Implications for further ASD understanding as measured by the SRS-2 will be discussed, as pertaining to their impact on broad groups as well as potential subgroup differences. This exploratory project provides a general framework for analyzing responses to the SRS-2 form.

Poster Session II, 12:30-1:30 PM

Location: South Meeting Room

Does type of pedagogy matter? The relationship between the Big Five traits and Montessori

Anne-Chanel Renald

University of Virginia

Advisor: Angeline Lillard, Ph.D.

Evidence indicates that attending Montessori pedagogy can shape one's way of thinking, behaving, and feeling across a wide spectrum of personality features. Very little research on nontraditional learning programs and the Big Five traits exist. The two studies described here aim to examine the influence of Montessori schooling on adult's (Study 1) and children's (Study 2) personality characteristics. Study 1 had a sample of 1905 adults, ages 18-81 ($M = 36$), who filled out a Big Five Personality Traits questionnaire consisting of 27 items. After including demographic covariates in the outcome model, results indicated that adults previously enrolled in Montessori schools for at least two years scored significantly higher on openness, conscientiousness, extraversion, and agreeableness, and lower on neuroticism than adults who had previously attended only conventional schools. Study 2 included 174 participants, 81 in Montessori and 93 in Conventional enrolled in the United states, ages 7-17. The participants completed the Big Five Personality Questionnaire for Children (BFQ-C), a newly developed self-report measure for assessing personality characteristics in youths. We will analyze the potential effects of Montessori schooling on the personalities of children grades 3rd-8th grades using a MANCOVA adjusting for demographic characteristics like SES and gender. Results show that children attending Montessori pedagogy are significantly more likely to demonstrate higher levels of openness, agreeableness, conscientiousness, and extraversion, and lower neuroticism than conventional students. If so, this will suggest that Montessori schooling has potential to affect personality.

Poster Session II, 12:30-1:30 PM

Location: South Meeting Room

Evaluating Online Cognitive Bias Modification as a Tool to Shift Intolerance of Uncertainty

Tylar N. Schmitt

University of Virginia

**Advisors: Bethany A. Teachman, Ph.D.
María A. Larrazábal, M.A. | Jeremy W. Eberle, M.A.**

While anxiety symptoms are highly prevalent, few people who experience them receive treatment. Digital interventions can increase access to care by delivering treatment online, often without therapist input. Cognitive bias modification for interpretation (CBM-I) is one such intervention that promotes flexible thinking in individuals who tend to interpret ambiguous information as negative, which is referred to as a negative interpretation bias. While research demonstrates that CBM-I is effective at reducing negative interpretation bias, much less is known about whether CBM-I shifts other key cognitive mechanisms of anxiety, such as intolerance of uncertainty (IU). IU is an instantiation of negative interpretation bias in which individuals believe that uncertainty is threatening and that they are unable to cope with it (e.g., whether the results of your blood work will come back normal). The current study aims to test the effectiveness of CBM-I at shifting IU. Participants were 259 community adults with moderate-to-severe anxiety symptoms who were randomly assigned as part of a larger trial to complete five weekly sessions of either CBM-I or psychoeducation and a 2-month follow-up. Additionally, at multiple time points, participants reported their level of IU. We hypothesize that multilevel modeling will show that participants in the CBM-I condition reported greater reduction in IU over time, compared to the reduction reported by participants in the psychoeducation condition. Our results will provide insight into whether CBM-I can help individuals better tolerate uncertainty.

Poster Session II, 12:30-1:30 PM
Location: South Meeting Room

A Multidimensional IRT Study of Five Factor Model Data: Validity Concerns

Justin Schreiber

University of Virginia

Advisor: Karen M. Schmidt, Ph.D.

Personality tests have become increasingly more common as businesses begin to use them in a variety of tasks, from assessing employees to inferring information about customers. The increased presence of these instruments leads to questions regarding their validity. While there are many studies assessing the validity of these instruments, there is a lack of research on the use of Item Response Theory (IRT) in assessing the validity of these instruments. IRT allows us to place the items and people on an equal interval scale, unlike past research. The International Personality Item Pool (IPIP) provides a questionnaire measuring five factor model (FFM) traits, Agreeableness, Conscientiousness, Extroversion, Emotional Stability, and Imagination. While there exists older validity research for this instrument, there is little research exploring the use of IRT with the FFM. We decided to fill this gap by performing an assessment of validity using IRT on the instrument, using the Eugene-Springfield Community Sample data, an open source dataset (Goldberg & Saucier, 2018). 570 participants completed all 50 items within the sample questionnaire. Using IRT, we will analyze the dimensionality, validity, and reliability of the instrument, and look for differential item functioning between the five traits. We predict that the instrument will have fewer than five dimensions, low reliability, and differential item functioning between Extraversion and Emotional Stability, and Agreeableness and Extraversion. This study will examine whether the IPIP instrument holds up under recent developments in the study of psychometrics. Regardless, this study will provide more confidence in the validity of personality testing.

Poster Session II, 12:30-1:30 PM

Location: South Meeting Room

“Divorced from the Dominant Campus Culture”: Experiences of Autistic University Students Navigating A System That Doesn’t Always Acknowledge Their Presence

Talyn Steinmann

University of Virginia

Advisors: Vikram Jaswal, Ph.D. | Kayden Stockwell, M.A.

Despite a lack of recognition from peers and faculty, autistic people are present and engaged in all aspects of university life. However, lower graduation rates, and a higher incidence of mental health struggles suggest that autistic students are not adequately supported. We conducted semi-structured interviews with 14 autistic students at a public university, centered around their perceived acceptance, factors that have promoted or impeded their inclusion, and suggestions for supports and improvements. Transcript analyses revealed that many participants felt alienated from the dominant campus culture. Events often felt inaccessible due to the sensory environment or a lack of information about what to expect. Participants also expressed that university policies assumed neurotypicality and did not consider that autistic students were present, emphasizing a need for accurate and increased autism awareness amongst peers, faculty, and administration. Participants suggested creating resources to help autistic students navigate the college experience as well as clarifying existing resources and reducing the barriers faced in accessing them. To ensure all students have an equal opportunity to succeed, universities must seek autistic students' feedback to create policies that better support a diverse student body.

Poster Session II, 12:30-1:30 PM

Location: South Meeting Room

Framing Racism

Jordan Taliaferro

University of Virginia

Advisors: Jazmin Brown-Iannuzzi, Ph.D. | Jaclyn Lisnek, M.A.

Recently due to movements such as #BlackLivesMatter, there has been an increase in the awareness of structural racism. However past studies have shown that people still see individual racism as a bigger issue than structural racism. One reason for the skewed opinions on individual racism, compared to structural racism, may be due to a lack of understanding of how individual and structural racism are linked to one another. This study investigates how well people comprehend structural racism and explores whether tying an individual to systemic forms of oppression can influence the distribution of punishment and accountability in the workplace. The findings from the study show that framing racism as systemic leads to a reduction of responsibility, intent, and punishment toward the perpetrator. Tying systemic racism to individuals results in an increase in support for structural policies.

Poster Session II, 12:30-1:30 PM

Location: South Meeting Room

Oral Presentations
1:45-3:15 PM
Commonwealth Room

“I wish we had more time, but that's ok”: Connection and Wellness among Undergraduate Peer Support Workers

Maxwell Tankersley

University of Virginia

**Advisors: Meghan Costello, M.A.
Alison Nagel, Ph.D. | Joseph P. Allen, Ph.D.**

Human beings have an inherent drive for social connection. Fostering that connection among vulnerable populations has proven to be a valuable buffer against serious mental health concerns. Positive health outcomes from peer support programs like Hoos Connected at the University of Virginia present an encouraging opportunity for peer connection and a new context for psychological intervention. While the health benefits for program participants are well-established, potential benefits for peer facilitators have remained unstudied. This study sought to analyze the emotional well-being of Hoos Connected student facilitators through quantitative and qualitative analyses of the same measures historically applied to group participants. Student facilitators responded to surveys at the beginning and end of their Fall 2022 semester that allowed us to investigate the relationship between facilitating and changes in mental health symptoms, sense of belonging, and emotional well-being as well as any potential moderating effects of their personality characteristics, demographic identities, and in-group experience. We hypothesized that Hoos Connected facilitators would exhibit significantly greater feelings of belongingness and well-being than a sample of students who are not involved in the program. The facilitators' responses are also contextualized in the wake of the school shooting that impacted their groups. We hypothesized that their reflections will convey both experiences of hardship returning to their groups as student leaders while dealing with their own recovery as well as opportunities to grow and heal as a part of a group sharing collective trauma felt across their community.

Oral Presentations (1:45-3:15 PM), 1st Presenter

Location: Commonwealth Room

Assessing Neural Variability and Infant Temperament on Attention Deficit in Early Childhood

Madison Monroe-Mohajerin

University of Virginia

Advisor: Dr. Meghan Puglia

Attention-deficit/hyperactivity disorder (ADHD) is a common childhood disorder characterized by impairments in attention, working memory, and inhibitory control. In infants, differences in temperament (a baby's behavioral style in regards to situational reactivity, emotion regulation and expression), are associated with ADHD in later childhood. Attentional differences in ADHD are also linked to an increase in neural “noise” – moment-to-moment electrical fluctuations intrinsic within neuronal networks.

126 infants initially underwent EEG and parent reported behavioral ratings at 4, 8, and 12 months of age. The current project assesses ADHD symptomology in this cohort, now 3-5 years-of-age. Infant temperament was assessed via parental report with the Infant Behavioral Questionnaire, neural variability was assessed via EEG multiscale entropy (MSE) computation, and ADHD symptomatology is assessed using the ADHD Rating Scale IV.

Preliminary data analysis shows an association between neural variability at 4 months and 12 months of age for beta frontal lobe entropy, infant sadness, and ADHD symptoms in toddlerhood.

The goal of this project is to identify associations between infant temperament, neural noise, and ADHD symptoms in early childhood to characterize early behavioral and neural markers of attentional difficulties and disorder, and help identify at-risk infants for earlier interventions.

Oral Presentations (1:45-3:15 PM), 2nd Presenter

Location: Commonwealth Room

Mass Incarceration as the New Jim Crow: A Quantitative Analysis

Naomi Nkan

University of Virginia

Advisors: Sophie Trawalter, Ph.D. | Kyshia Henderson, M.A.

In her seminal book, Michelle Alexander argues that mass incarceration today functions much like Jim Crow did in the past: it serves to systematically control and disenfranchise Black people. In the present work, we take seriously Michelle Alexander's thesis that mass incarceration is, metaphorically and functionally, like a New Jim Crow. We examine whether racist systems give rise to new racist systems, from slavery to Jim Crow, and Jim Crow to contemporary mass incarceration. We do so by merging county-level data on mass incarceration, Jim Crow era violence – specifically, lynching – and slavery; specifically, the proportion of the population that was enslaved in 1860. Preliminary analyses reveal patterns consistent with Alexander's argument, which proposes that the enslaved population in 1860 predicts lynching during Jim Crow and, in turn, mass incarceration today, at the county level. Future work will need to consider how the education system works with (or against) these systems to produce patterns of inequalities. Based on Alexander's thesis and my own reading of the literature, I predict that mass incarceration will be related to racial disparities in school disciplinary action, consistent with work on the school-to-prison pipeline. Taken altogether, this work sheds light on the persistence of racism today, and how we have yet to escape our racist past.

Oral Presentations (1:45-3:15 PM), 3rd Presenter

Location: Commonwealth Room

Keynote
Commonwealth Room
3:30-4:45 PM

Angela Gutches, Ph.D.

Professor of Psychology, Brandeis University

How do Culture and Age Affect Memory

Angela Gutches's research investigates the influence of age and culture on memory and social cognition using behavioral, neuroimaging, and patient methods. She attended Boston University for her BA/BS degrees, University of Michigan for her PhD with Denise Park, and completed Postdoctoral training at MGH/Harvard with Dan Schacter. Currently, she is a Professor of Psychology at Brandeis University, with appointments in Neuroscience and the Volen Center for Complex Systems. Angela is on the Psychonomic Society Governing Board and is the Chair for 2023. She has served an Associate Editor at *Cognition*, *Memory & Cognition*, *Journal of Gerontology: Psychological Sciences* and *Memory*. In addition to her empirical research, she has published books on cognitive aging: *The Cognitive and Social Neuroscience of Aging*, and *The Cambridge Handbook of Cognitive Aging: A Life Course Perspective* (co-edited with Ayanna Thomas) and serves as the co-organizer (with Suparna Rajaram) of the Culture & Cognition pre-conference at Psychonomics.

