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## **Abstracts from the 2015 Oklahoma Research Day**

### **Held at Northeastern State University**

#### **05. Mathematics and Science**

#### **17. Psychology**

##### **05.17.01 Hand Location Effects Object Recognition Times**

**Mickie,Vanhoy** *University of Oklahoma*

**Shanshan,Huang** *University of Central Oklahoma*

**Thomas,Taylor** *University of Central Oklahoma*

Hand position relative to visible objects may facilitate object perception times, possibly because objects near hands are likely to be important. Research has described the effects of having hands visible or occluded on response time and accuracy in a dual haptic-visual task using regressions and linear modeling to attempt explanations. Instead of forcing regression lines onto nonlinear data to fit decomposable models, I am using ideas from complexity theory to describe my thesis data. I am interested in coordinated systematic behavior over sustained tasks, so I am using a visual-motor task that requires participants to maintain a pattern of computer mouse movement whilst identifying letters briefly presented in the visual periphery. My Python program presents letters R and L at two randomized locations and collects mouse data at six moments per trial. The adaptive stimuli onset asynchronies (SOAs) are the temporal units of interest; they constitute a strophic time series that SPSS cannot accommodate so I am using R to perform Multifractal Detrended Fluctuation Analysis (MFDFA), Continuous Wavelet Transforms (CWT), and Wavelet Transform Modulus Maximus (WTMM). The multifractal fractal analyses afford detecting stable interactions and their associated correlations.

##### **05.17.02 Effects of Gender Norms and Heterosexism on Adoptions and Disgust**

**Evelyn,Stratmoen** *University of Central Oklahoma*

**Thomas,Hancock** *University of Central Oklahoma*

This study investigated how priming gender norms and heterosexism levels predicted homosexual discrimination in adoption cases along with evoking implicit disgust. Participants were primed with either pictures of gender normative activities, gender non-normative activities, or neutral nature scenes. It was found that priming participants did not affect adoption choices, contradicting previous findings.

### **05.17.03 The Curmudgeon Personality: Seeing the Positives and Just Not Liking Them**

**CHRISTOPHER,DITZFELD** *University of Arkansas*

**Jenel,Cavazos** *Cameron University*

**Kelsee,Monroe** *Cameron University*

**Problem** The current project examined inclinations for orienting to negative and positive emotional content in the curmudgeon personality. **Method** Participants included 141 students who voluntarily completed an online questionnaire study. The study included measures of dispositional negative attitudes (DAM), trait negative affect (PANAS), and avoidance temperament (BIS). Participants then completed a Word Fragment Completion (WFC) task, in which they were asked to fill in blank letters to create words (16 positive or neutral; 16 negative or neutral). **Results** As was hypothesized, dispositional negative attitudes were positively associated with the total number of emotion-based words created in the WFC task, even after controlling for trait negative affect ( $\beta = .17$ ,  $p = .044$ ). However, contrary to expectations, dispositional negativity was not associated with a tendency to create more negative than positive words ( $\beta = .02$ ,  $p = .774$ ). **Conclusion** The results of this study indicated that curmudgeons showed an inclination for generating both negative and positive words when presented with ambiguous word stimuli. Despite their apparent sensitivity to both positive and negative emotional stimuli, their overall negative disposition suggests that they do not particularly like stimuli of either valence, which could be due to the perpetually strong emotional state in which they inhabit.

### **05.17.04 The Impact of Support on Post Traumatic Stress Disorder in Military Personnel.**

**Stephanie,Lieber** *University of Central Oklahoma*

There is a trifecta of support that influences the development of Post Traumatic Stress Disorder (PTSD) in military personnel. The research has determined several ways of decreasing PTSD in military personnel: providing high levels of unit cohesion, perceived family support, and perceived social support. The most common technique that was used was surveys to determine the soldier's level of perceived support, along with general assessments and PTSD assessments given by the Department of Veterans Affairs.

## **05.17.05 Examining the Social Dynamics of Sexual Intent and Commitment Perception II**

**Amelia, Brewer** *University of Central Oklahoma*

**Gabriel, Rupp** *University of Central Oklahoma*

The aim of this study was to explore Error Management Theory (Haselton & Buss, 2000), replicating previous studies that examined perceived interest and commitment in men and women. In the current study, we employed a modified version of the instruments, using neutral terminology in order to include a broader demographic in terms of sexual orientation. We used the Bem Sex Role Inventory Scale of masculinity/femininity (BSRI) (Bem, 1978) to examine how these characteristics affect responses. This replication differs from our first study in that we used a wider range of recruitment tools through social media to gain a larger and more diverse sample size. The hypothesis for the current study was that women tend to under-perceive commitment and men tend to over-perceive sexual interest regardless of sexual orientation. Participants filled out an online survey with questions concerning potential relationship scenarios. The expected outcome is a gender difference on sexual intent between self-report ratings and perception of partner ratings, based on results from our previous study. Implications concerning sexual orientation and gender schema theory will be discussed.

## **05.17.06 The Effect of Aerobic Exercise on Cue Reactivity in Cases of Alcohol Use Disorder**

**Kaitlyn, McElroy** *University of Central Oklahoma*

Relapse remains a major problem in the treatment of alcohol use disorders (AUD). The use of exercise as an adjunct treatment reduces relapse in this population and decreases depression. A neurological marker for relapse and craving are increased P3 amplitudes in the cerebral cortex, which occurs in response to alcohol related cues in people with AUD. The aim of this study is to determine if participation in an aerobic exercise program such as kayaking can reduce P3 amplitudes and craving in response to alcohol beverage cues in persons with AUD. Twenty-four participants positive for an AUD will be randomly assigned to an 8-week kayak based aerobic exercise program or to a sedentary control group. Before and after the completion of the exercise program participants will view images of alcoholic beverages, non-alcoholic beverages and neutral images on a computer screen while P3 amplitudes are recorded. Craving will be assessed before and after alcohol cue exposure using the desire for alcohol questionnaire. It is expected that there will be a decrease in P3 amplitudes and craving during the alcohol cue reactivity task after 8-weeks of aerobic activity.

## **05.17.07 Fundamentalism Drives IQ Differences between Theists and Non-Theists**

**Alisa, Huskey** *University of Central Oklahoma*

**Caleb, Lack** *University of Central Oklahoma*

**Kathryn, Schrantz** *University of Central Oklahoma*

Conclusions drawn from research on the relationship of religiosity and intelligence are limited because methodology in studies of this potential relationship is incredibly variable. There has been very little consistency in the measures used to assess religious variables across studies. There is also little consistency across studies in how intelligence is typically assessed or even defined. Based on a review of literature, it was predicted that high levels of religious fundamentalism would be related to lower levels of intelligence. It was also predicted that there would be no relationship between general religiosity and intelligence once religious fundamentalism was taken into account. A total of 84 undergraduate students with a mean age of 20.58 years ( $SD = 3.98$ ) participated in the study. WASI-II mean verbal IQ was 102.74, mean performance IQ was 101.15, and mean full-scale IQ was 102.26 for the total sample. Correlational analyses showed significant relationships between higher FSIQ and lower overall strength of religious faith ( $r = -.342, p < .001$ ), lower religious fundamentalism ( $r = -.313, p = .004$ ), higher certainty of non-existence of god ( $r = .317, p = .003$ ) and lower sense of personal specialness ( $r = -.324, p = .003$ ). To examine the relative strengths of these different aspects of, regression analyses were performed and showed that when fundamentalist beliefs are accounted for, general religiosity did not significantly predict IQ score.

## **05.17.08 What predicts college students' intentions to seek counseling?**

**Alisa, Huskey** *University of Central Oklahoma*

**Kyle, Haws** *University of Central Oklahoma*

**Veronika, Karpenko** *University of Central Oklahoma*

**Objectives.** A large number of university students struggle with anxiety, depression, and relational problems that negatively impact their academic performance and could lead to dropping out of the universities. Besides the expected stressors that come with pursuing higher education, young adulthood is also the onset for the majority of mental illnesses that respond well to psychological counseling. The present study examined students' intentions to seek counseling and how these intentions are affected by psychological distress, interpersonal problems, academic impairment, and recent distressing events. **Hypotheses.** Student's intentions to seek counseling will be predicted by higher levels of psychological distress, interpersonal or academic difficulties, and greater number of distressing events in the past three months. **Methodology.** 366 participants (76% female) between the ages of 18 and 49 ( $M = 20.8, SD = 4.7$ ) completed the measures: the Intentions to Seek Help for Hypothetical Distress, Willingness to Seek Help Scale, Outcome Questionnaire, Perceived Stress Scale, Distressing Events, and Academic Impairment. **Summary.** Regression analyses will be performed to examine how much variance is explained in intentions to seek counseling by psychological distress, perceived stress interpersonal or academic difficulties, and greater number of distressing events in the past three months.

### **05.17.09 A Comparison of Self-reported Self-care Outcomes Following a Two-day Wellness Seminar**

**Elizabeth, Keller-Dupree** *Northeastern State University*

**Gregory, Gwin** *Northeastern State University*

**Jennifer, Rodriguez** *Northeastern State University*

**Jessie, Guidry** *Northeastern State University*

Wellness is defined as a way of life that is directed toward enhanced living through an integrated awareness of the mind, body, and spirit. Because wellness is a holistic counseling intervention, meaning that it focuses on individual physical, emotional, spiritual, social, and other components of overall health, it is a valuable topic to integrate not only into counseling practice but also into counselor-in-training experiences. The current study involved undergraduate and graduate participants completing an online two-day wellness seminar. Students were given pre- and post-tests of three assessments measuring levels of self-care, professional quality of life, and stress reaction. Results offer findings into the self-reported levels of self-care noted by students directly following completion of this experience. Implications for helping professional training and practice will be offered. Keywords: Wellness, Wellbeing, Experiential Education, Counselor Training

### **05.17.10 Cultural Value Conflict, Problem Solving Skill, and Psychological Well-Being in 1.5 and 2nd Generation South Asian Indians in America**

**Eunice, Melakayil** *University of Central Oklahoma*

**Lorry, Youll** *University of Central Oklahoma*

Family structures within European Americans differ from those found in Asian Indian families, in which European American families are usually nuclear, egalitarian, and individualistic. For Indians, with collective values, the concepts of privacy, personal space, and individualism are diametrically opposed to that of European Americans. Many Indian immigrants struggle to reconcile the opposing values of their Indian culture with that of their host country. Generally, the younger immigrants, specifically the 1.5 and 2nd generation immigrants, want to be independent as they become more assimilated into the culture of their host country, but they do not at the same time want to disappoint their families. However, the older immigrants from the 1st generation usually cling tightly to their Indian values and fear the impact the host country's culture will have on their family structure. The goal of the current study is to examine cultural value conflict, interdependent and independent problem solving skills, and psychological consequences of cultural value conflict in 1.5 and second-generation South Asian Indian immigrants living in the United States. It is expected that higher ratings of cultural value conflict will be positively related to psychological distress and second-generation immigrants will have independent type problem solving skills as opposed to interdependent type problem solving skills with the 1.5 generation.

### **05.17.11 Understanding The Mirror Neuron System, Empathy, And Pain Recognition**

**Deon,Hall** *University of Central Oklahoma*

**Justin,Durham** *University of Central Oklahoma*

Empathy is a process activated by higher-order factors such as imagination of or direct perception of visual occurrences. Perceiving empathy is necessary for interpreting pain, making empathy a primary function of social interpersonal relationships. Support from recent research demonstrates that watching others experience physical pain activates brain regions related to the actual experience of pain itself. Mirroring is a basic learning function of the human brain and relies on intricate neural networks including the mirror neuron system (MNS). A lack of empathy and pain recognition, related to an inefficient mirror neuron system has potential to exhibit psychopathic traits. The purpose of this project is to determine if vicarious experiences of pain recognition and empathy relate with higher psychopathic traits. Additionally, evaluating neurological activity by electroencephalography (EEG) recording is a noninvasive and affordable technique for measuring the mirror neuron system. Electrodes will be placed according to the International 10-20 system to calculate difference in amplitude for evaluating relative frequency and power between active (+) and reference (–) electrodes. Participants will complete a prescreening packet containing the Short Dark Triad scale to measure Machiavellianism, narcissism, and psychopathy, and the Toronto Empathy Questionnaire. The expected outcome is that pain recognition will be positively associated with empathy by mirror neuron activati

### **05.17.12 Attitudes, Impulse, and Mechanisms: The Who, What, and Why of Student Debt**

**Heather,Martin** *University of Central Oklahoma*

**Janelle,Grellner** *University of Central Oklahoma*

The significant debt of college students rises with each graduating class. The United States' increased use of credit cards ranks with the highest levels of bankruptcy rates in the world. The current research conceptualizes the components of student debt as financial attitudes, impulse control, and spending mechanisms. Up to 100 students from two undergraduate psychology courses will be assessed for financial attitudes and impulsivity using empirically supported scales. After assessment students will randomly participate in a payment group, the control group (combination of payment methods chosen by participants), a cash only group, or a card only group, for a four week period. At the conclusion of the spending period participants will submit receipts and statements for analysis and receive financial education resources provided by Oklahoma CPAs and Oklahoma Money Matters. We hypothesize poor financial attitudes and high impulsivity will result in increased spending overall, low impulsivity and conscientious financial attitudes will result in lowest spending overall, and students who use cash only will spend less than the card only or control group. We seek to identify specific individual and combinations of cognitive and behavioral processes involved in varying levels of student debt and to create a financial education program that generates awareness among college students and teaches the skills and perspective needed to graduate from higher institutions debt free.

### **05.17.13 Motor Synchronization and Team Coordination**

**Adam Braly** *University of Central Oklahoma*

Empirical evidence from twenty years of motor coordination research has revealed that patterns emerge dynamically under task constraints (e.g., Haken, Kelso, & Bunz, 1985). These findings have been extended to demonstrate interpersonal interlimb coordination (Schmidt, Bienvenu, Fitzpatrick, & Amazeen, 1998). Additionally, nonlinear analysis of team coordination has shown that teams dynamically coordinate to accomplish a task (Gorman, Amazeen, & Cooke, 2010). The proposed study employs motion capture of hand movements during a cooperative manual task, and motion data will be analyzed using the methods of cross-recurrence quantification (Zbilut, Giuliani, & Webber, 1998). It is hypothesized that data series of dyads completing the task faster will reflect similar system states (e.g., longer and more frequent recurrent states) that are perhaps indicative of interpersonal coupled oscillations.

### **05.17.14 Motivational Effect of Extrinsic Rewards and Social Comparison on Inhibitory Control in Adults with ADHD**

**Tephillah Jeyaraj-Powell** *University of Central Oklahoma*

**William Scott Sims** *University of Central Oklahoma*

The current study is an attempt to understand the link between reward processes and behavioral inhibition in adults with ADHD. Studies have shown that motivation is a moderator of inhibitory control in children with ADHD, but little has been done to show the same effect in adults with ADHD. Additionally, social rewards such as praise and positive feedback have been shown to be a moderator of inhibitory control in children with ADHD, though not as strong as tangible rewards. The current study will use false information regarding the performance of other participants as well as monetary rewards as mediators. Failures of inhibition will be measured using a Stop-Signal Task (SST). The study utilizes a 3x2 mixed design, with participants being randomly assigned to one of three conditions: no-reward, low-reward, and high reward. It is expected that participants in the high-reward/feedback condition will exhibit the greatest inhibitory control, and those in the no-feedback/no-reward condition will exhibit the least inhibitory control.



### **05.17.15 The Effects of a Visuospatial Secondary Task on Situation Model Construction During Reading**

**J,Randall** *Cameron University*

**John,Geiger** *Cameron University*

**Sarah,Downen** *Cameron University*

People form several representations during reading. The situation model represents the situation described by the text and contains both information from the text and inferences. Perrig and Kintsch studied the situation models formed while reading, and found that text style affects the type formed. Route texts led to a proposition based model; survey texts lead to a spatial model in females. Males formed a spatial model for both texts. Shah and Miyake demonstrated that working memory consists of 2 different systems: verbal and spatial. Friedman and Miyake found that spatial components of situation models use spatial WM, and the causal components rely on verbal WM. The present study presented route and survey texts while tying up spatial WM with a Visuospatial Tapping task. If all situation model formats contain perceptual components and rely to the same degree on visuospatial WM, then the secondary task should affect all formats equally. If a spatial model requires more resources in WM memory than a linear model, then performance should decline for the survey text more than that route text with the task. 42 participants read route or survey text and 23 participants performed the secondary task. Locative and inference questions were asked about the text. Participants also recalled the text and drew maps of the town. No significant effects or interactions were found for the questions. The recall and map drawings are being analyzed and will be presented at the conference.

### **05.17.16 The Importance of Attention Control: The Bridge of Hope Between Mindfulness and Flourishing**

**Jedediah,Bragg** *University of Oklahoma*

**Kara,Brunk** *University of Oklahoma*

Mental health professionals have long been interested in the benefits of training attention. Our study (N=102) explores the relationship between attention control, mindfulness, and hope. We explored the differences between mindfulness and attention control via exploratory factory analysis and found a significant overlap. Next, we performed a hierarchical regression indicating mindfulness did not account for any unique variance over attention control in the prediction of hope. Because our results suggest that mindfulness is synonymous with greater attention control, we theorized that mindfulness is used to generate hope, resulting in the perception that one is psychologically flourishing. To test these causal relations, we performed a mediation analysis with mindfulness as the exogenous variable leading to hope which leads to flourishing. The test included a bootstrap analysis that indicated the indirect effect was statistically significant. Significance tests indicated that hope as a mediator accounted for 78% of the variance between mindfulness and flourishing. This effect size suggests that hope is a full mediator between mindfulness and flourishing consistent with our proposed causal model. Our results are consistent with mindfulness and higher attention control being identical states. Moreover, our results suggest that attention control is central to hope, consistent with theories suggesting that hopeful people "focus" on positive outcomes.

### **05.17.17 Importance of family support to building hope among a sample of adolescent females**

**Jedediah, Bragg** *University of Oklahoma*

**Kara, Brunk** *University of Oklahoma*

**Vanessa, Brown** *University of Oklahoma*

Hope for a better future is a cognitive set that predicts multiple well-being outcomes such as life satisfaction, self-worth, and meaningfulness of life. Moreover, theory suggests supportive families play an important role in instilling hope within individuals. Yet, to our knowledge no research exists that tests the importance of family support to the development of hope. We tested among adolescent females (N=557) a path model of family support as a causal variable for building hope that leads to greater life satisfaction. The path analysis proved statistically significant, a result consistent with the theory that family support is an important causal variable for building hope. These results have important implications for both individuals and family therapies, as they suggest the perception by individuals that their families provide support is an important causal variable in the development of hope leading to life satisfaction.

### **05.17.18 Effect of Profanity on Perception of Pain in Those Being Bullied**

**Christopher, Stevens** *Southwestern Oklahoma State University*

**Stephen, Burgess** *Southwestern Oklahoma State University*

The National Educational Association estimates that every 7 minutes a child is a victim of bullying and 85% of the time there is no student or adult intervention. One factor that may affect whether someone intervenes is the evaluation of the experienced during bullying. Perception of pain in others is affected by several psychological, behavioral and contextual factors (Sullivan et al., 2006). The communication model of pain proposes that the sender's (the person thought to be experiencing pain), pain behavior, the receiver's sensitivity to features of the senders' behavior and the receiver's attitudes and beliefs may affect the perception of pain in others (Craig, 1998). In the present study we explored differences in perceived pain others between males and females. Participants were 70 primarily Caucasian freshmen college students (mean age = 19.2). Participants completed a series of scenarios designed to portray a variety of bullying types (e.g., cyber, physical, emotional) and severities. The scenarios were extensively piloted to identify those that represented a range of scores on these factors. The scenarios varied by type of bullying (physical or emotional emphasis), gender of person being bullied, and age of the person being bullied. No significant differences in ratings of perceived pain experienced during being bullied based on gender of rater were observed. There were also no significant interactions between gender of rater and t

## **05.17.19 Arguing against yourself: Exploring the relationship between episodic memory and perjury**

**Jordan,Pyle** *University of Central Oklahoma*

**Kelly,Jent** *University of Central Oklahoma*

**Thomas,Hancock** *University of Central Oklahoma*

False memories are the incorporation of new material into memory which modifies what people believe they experienced. This acquisition of new information contaminates the original memory of the event, reconstructing it. False memory research has consistently shown how misinformation presented after an event affects subsequent recall. What is unknown in the literature is how malleable memory is once the participant has already provided a testimony of the event. To this end, this study evaluated the effects of false information given to participants contingent upon their original testimony. Participants were required to watch a video and either give a testimony or answer questions about what they witnessed. After a week delay, participants were provided with information that either confirmed or disconfirmed their original testimony. For each statement participants had to indicate if the statement was accurate or not and provide their confidence for each claim. Participants were likely to accept misinformation presented to them a week later that specifically contradicted their original accurate testimony. Confidence ratings showed that participants overall confidence was less about the new information; however, when given a dichotomous choice (yes, it happened/no, it did not happen) they would still choose the former. This study suggests that false information presented after a period of time still affects the memory of an event.

## **05.17.20 Laser Bees: The Future of Planetary Defense**

**Darion,Releford** *Northeastern State University*

Laser bees are tiny spacecraft designed to deflect asteroids that threaten the earth. They are small and travel in a swarm. Each craft is equipped with a high-powered laser that is used to vaporize part of the asteroid. Laser bees will alter the course of dangerous asteroids causing them to miss the Earth. There are various groups, led by the Planetary Society, working together to develop laser bees. They test the technology and techniques needed to make the swarm efficient.

## **05.17.21 How Fatherly Involvement Relates to Teenage Pregnancy and Perception of Sexual Behaviors**

**Alexis,Schroeder** *Southwestern Oklahoma State University*

**Kristin,Woods** *Southwestern Oklahoma State University*

Lack of father investment or the absence of the father does relate to how early adolescents start to get involved in sexual activities and how early adolescent pregnancies happen (Mendle, Van Hulle, Brooks-gunn, Emery, Harden, Turkheimer, D'Onofrio, Rodgers, Lahey, 2009). Today, there are around 820,000 teen pregnancies happening each year, with 80 percent of those unintended (Familyfirstaid, 2015). The purpose of this study was to examine the relationship between fatherly involvement and pregnancies in adolescents. The sample was drawn from the first wave of the U.S. National Longitudinal Study of Adolescent Health (AddHealth), which included adolescents in seventh through twelfth grade. Chi-square analyses and bivariate graphs were used to examine the relationship between adolescent pregnancies and time spent with their father. The results suggest that there is a statistically significant relationship between how involved the father is in the female adolescents' life with how adolescents perceive risky sexual behaviors from an early age. In conclusion, those that had an absent father or a less involved father were more likely to engage in risky sexual behaviors and get pregnant at an early age. The findings of this research coincide with the results of previous research, which taken together suggests that female adolescents with a strong relationship with their biological father are less likely to engage in risky sexual behaviors at an early age.

## **05.17.22 The Relationship between Stress, Sexualization, and Salivary Hormones**

**Ashley,Murray** *University of Toledo*

**Gwendolyn,Burgess** *Southwestern Oklahoma State University*

**Laura,Burleigh** *Southwestern Oklahoma State University*

**Lisa,Appeddu** *Southwestern Oklahoma State University*

**Melinda,Burgess** *Southwestern Oklahoma State University*

**Patra,Kositchaiwat** *Southwestern Oklahoma State University*

The objectives of this study were to investigate the relationship between stress level and salivary hormones after subjects were asked to conduct poses that were either high or low in sexualization and power. This study is part of a larger experiment that followed the published methods of Carney, Cuddy, and Yap (2010) in evaluating cortisol and testosterone levels. Briefly, two sets of salivary samples were collected per subject before and after conducting a physical pose to evaluate whether any change from baseline occurred. A subset of 57 out of the 86 original samples were randomly chosen after stratification by treatment. Samples were stored at -40 degrees Celsius until analyzed in duplicate using Salivary Assay kits (Salimetrics, LLC). Factors that will be reported include: (1) changes in salivary alpha-amylase (as a proposed indirect indicator of adrenergic activity), estrogen, and progesterone levels, if any, (2) relationship of the three previous salivary components with cortisol and testosterone, and (3) their relationship with stress levels as self-reported by subjects. Results obtained from this study will be applied to future research designs which evaluate salivary hormones in test subjects exposed to different stimuli.

### **05.17.23 The Relationship Between Interpersonal Functioning and Anxiety within Adolescent Delinquent Males**

**Gwendolyn,Burgess** *Southwestern Oklahoma State University*

**John,Barnett** *Southwestern Oklahoma State University*

Problem: Various lines of research suggest that juvenile delinquents may experience elevated levels of anxiety, and that this may be associated with decreased levels of interpersonal functioning. This study will focus on the relationship between the interpersonal scale of emotional intelligence and anxiety, for juvenile delinquent males in a residential setting. Method: Participants consisted of 105 juvenile delinquent males between 16 and 18 years of age, within a residential facility. Upon arrival, all residents were administered a battery of assessments including the Multidimensional Anxiety Scale for Children (MASC), and the BarOn Emotional Quotient Inventory- Youth Version (EQ-I:YV), which incorporates the Interpersonal Scale of Emotional Intelligence. Scores were obtained upon arrival to the facility and immediately prior to discharge in order to obtain pre and post assessment scores. A simple linear regression was performed utilizing SPSS 22.0 to explore the relationship between the Interpersonal Scale of emotional intelligence and a total score of anxiety. Results: will lead to an increased understanding of the juvenile delinquent population and may help identify variables that can be targeted for intervention. These interventions may then provide an effective path toward the overall treatment of juvenile delinquency.

### **05.17.24 Gender Differences in the Immediate Perception of Violent Scenarios**

**Adam,Everson** *University of Central Oklahoma*

**Melissa,Baker** *University of Central Oklahoma*

This study investigates how differences in the gender of the aggressor and time given to respond influences immediate judgments of and reactions to viewing a violent situation. When given a generous amount of time to respond to a situation, one may provide a strategic response based on social learning of behavior inhibit, views of traditional gender roles and false re-imaginings of the event. This study, then, investigates the immediate perceptions of a violent situation not influenced by these controlled cognitive processes. Upon viewing videos depicting an actor aggressing toward the camera, participants will be asked to provide an immediate response regarding their aggressive feelings toward the actor. It is expected that male participants will generally rate situations as less violent but will have elevated levels of aggression following the viewing of a violent situation. This aggressive response from males will not be amplified in the face of an aggressor violating normal gender roles (e.g., a woman aggressing physically) as this should be the product of more controlled social processes that would not have time to influence responses given the immediate response deadline. This study hopes to extend the current knowledge on gender-based differences in the perception of and reactions to a violent situation, allowing for a more thorough understanding of how individuals, particularly eyewitnesses, can vary in their understanding of the same violent situation.

## **05.17.25 The Association of Adolescent Drinking Behavior with Relationship to Parents**

**Kristin, Woods** *Southwestern Oklahoma State University*

**Rachel, Yarnell** *Southwestern Oklahoma State University*

**Cynthia, Spering** *Northeastern State University*

**Karie, Cragg** *Northeastern State University*

A major public health problem in the U. S. is alcohol use in those under 21 years of age with 24 percent of youth reporting drinking and 15 percent reporting binge drinking (Centers for Disease Control and Prevention, 2014). Engaging in this risky behavior for underage youth resulted in approximately 189,000 emergency room visits in 2010 and over 4,300 annual deaths. Recent research looked at parents who consume alcohol in front of the adolescent and how that could influence the rest of the adolescent's life (Cranford, Zucker, Jeste, Puttler, & Fitzgerald, 2010). Results found that when a parent drinks alcohol in front of the adolescent then in adulthood the adolescent is more likely to use and abuse alcohol. The purpose of this study was to examine how an adolescents' relationship with their parent relates with drinking behaviors. The sample was drawn from the first wave of the U. S. National Longitudinal Study of Adolescent Health (AddHealth), which included adolescents in seventh through twelfth grade. Chi-square, correlation, and ANOVA analyses were used to examine the data. The results suggest that if the parent is present when the adolescent is consuming alcohol then alcohol consumption is lower and lack of parental presence increases amount and frequency of alcohol. Adolescents' who partake in this risky behavior tend to be in more trouble with their parents. In conclusion, parental involvement in an adolescents' life is associated with

## **05.17.26 Native American college students' personal growth initiative, health, and ethnic identity**

**Alissa, Baker-Oglesbee** *Northeastern State University*

**Amber, Wigington** *Northeastern State University*

The main objective of this study was to explore relationships between personal growth initiative, life-satisfaction, physical and mental health, and ethnic identity in a diverse student population with high numbers of Native Americans. The Personal Growth Initiative Scale-II (PGIS-II; Robitschek et al., 2012) measures an individual's capacity for intentional self-improvement and is associated with many aspects of better functioning. There is limited theory and research on the way many positive psychology constructs function within diverse groups (Robitschek & Spering, 2012). College students were recruited and surveyed for this study. Due to individual group sizes, only the students who identified solely as white/Caucasian (N= 262) or solely as Native American/American Indian (N = 140) were included in these analyses. Results indicate that Native American and white participants did not differ significantly on their overall PGIS-II scores, nor on their PGI subscale scores. Higher PGIS-II scores were related to fewer days of rated "not good" mental health for the Native American group ( $r(136) = -.21, p = .01$ ). In regression analyses, total PGIS-II scores did not predict mental and physical health, but post hoc regressions revealed that several of the PGIS-II subscales were significant predictors for both groups. The findings contribute towards a growing body of research on possible benefits of higher levels of PGI, as well as applicability to diverse groups.

## **05.17.27 Measuring Moral Behavioral Reactions After Autonomic Feedback**

**Dustin,Belden** *University of Central Oklahoma*

Moral dilemmas have been a part of Social psychological research for decades, as have attachment styles and group behavior. Research has also shown that moral decisions have been altered after the experience of cardiovascular feedback, that attachment styles can change later in adulthood, and can even change again due to the type of group a young adult chooses to be a member of. It is the belief of the author that the most accurate moral position can be obtained after a cardiovascular feedback condition, and that cardiovascular activity needs to be analyzed dynamically, in order to understand the outcome difference this method provides over previous research methods. It is hypothesized that the addition of autonomic feedback, even through false feedback, will provide a more accurate understanding of a person's real life moral position. Attachment style questionnaires will be given to understand the person's attachment style, and cardiovascular activity will be analyzed through standard fourier transforms. It is proposed that the pink noise will show greater intention as false feedback is increased. Correlations between dynamic feedback and attachment styles is unknown.

## **05.17.28 Exploration of undergraduate psychology majors' involvement in research: A pilot study**

**Alissa,Baker-Oglesbee** *Northeastern State University*

**Amber,Wigington** *Northeastern State University*

**Cynthia,Spering** *Northeastern State University*

**Elizabeth,Keller-Dupree** *Northeastern State University*

According to guidelines set forth by the American Psychological Association, scientific inquiry and critical thinking skills are critical to the undergraduate psychology major. Students develop these skills in courses on Statistics, Research Methods, and other core courses in their program of study; however, students who participate in additional research and critical thinking projects outside of regular courses are able to further develop those skills. This exploratory pilot study was conducted at a regional teaching university in order to better understand our psychology majors' thoughts, beliefs, and feelings about the research process and the prospect of engaging in research at our institution. It was hypothesized that research-related coursework and plans to apply to research-related graduate programs would be positively correlated to scores on the Research Beliefs Questionnaire (RBQ). Higher scores on the RBQ were associated with having taken Experimental Psychology. A data-driven thematic coding procedure identified that students who were not currently involved in research described two main themes for not participating: a) a lack of time and b) a lack of information/opportunities. Understanding our students' perceptions about research is critical in our ongoing efforts to improve the research presence in our department and our psychology major overall. In this poster, our future plans for amelioration as well as general tips gleaned from this process are discuss

## **05.17.29 Relationships Between Ethnic Identity, Health, and Life-Satisfaction in Native American Students**

**Alissa, Baker-Oglesbee** *Northeastern State University*

**Amber, Wigington** *Northeastern State University*

**Cynthia, Spering** *Northeastern State University*

**Karie, Cragg** *Northeastern State University*

The primary objective of this study was to explore relationships between measures of life-satisfaction, health, and ethnic identity in a diverse, semi-rural student population. Preliminary data were collected via an online survey at a mid-sized, semi-rural regional university. Participants were asked to respond to 4 surveys: the PGIS-II (Robitschek et al., 2012), the Multigroup Ethnic Identity Measure (Phinney, 1992), the Satisfaction with Life (SWL) scale (Diener, 1985), and a general demographic survey that includes 3 questions related to general physical and mental health. Participants who identified as Native American were also asked to complete the Native American Acculturation Scale (Garrett & Pichette, 2000). It was hypothesized that ethnic identity would be positively correlated with the variables of satisfaction with life, physical and mental health. Significant results were found in the expected direction and included a significant negative correlation between traditionalism and poor physical health ( $r = -.174, p < .05$ ) for Native American participants. Caucasian participants displayed significant negative correlations between SWL and poor physical health ( $r = -.248, p < .001$ ), poor mental health ( $r = -.387, p < .001$ ), and poor mental and physical health combined ( $r = -.255, p < .001$ ). For Native Americans, only poor mental health was significantly negatively correlated with SWL ( $r = -.258, p < .01$ ). Implications will be discussed.

## **05.17.30 Doing is believing: Increasing student buy-in for introductory statistics**

**Kristin, Woods** *Southwestern Oklahoma State University*

The teaching of statistics is limited by numerous challenges that are not easily overcome with traditional pedagogical approaches. While many statistics courses teach the mathematics or application of methodology, few convey the necessary skills of approaching a scientific problem from a statistical perspective. In this way, the “tools” that students are commonly provided, often do not serve them well given real world challenges or convey the same “rich, complicated context, and decision-making issues present in the experience of real application” (Nolan & Temple Lang, 2009). Using a flipped-classroom approach with online lectures and in-class work on individual projects, students learn introductory statistics by performing original research using real datasets. The learning materials and teaching strategies were designed to be structured enough to allow students to consistently move forward with their research projects, yet broad enough to encourage students to creatively and independently explore their questions by actively driving the decisions involved in inquiry. Students learn how to pose a research question, prepare data for analysis, and answer their question using archival data and SAS. This poster will discuss the pre-post survey results of student interest and knowledge in statistics and pre-post test results from the ARTIST that evaluates statistical literacy, statistical reasoning, and statistical thinking (delMas, Garfield, Ooms, &