



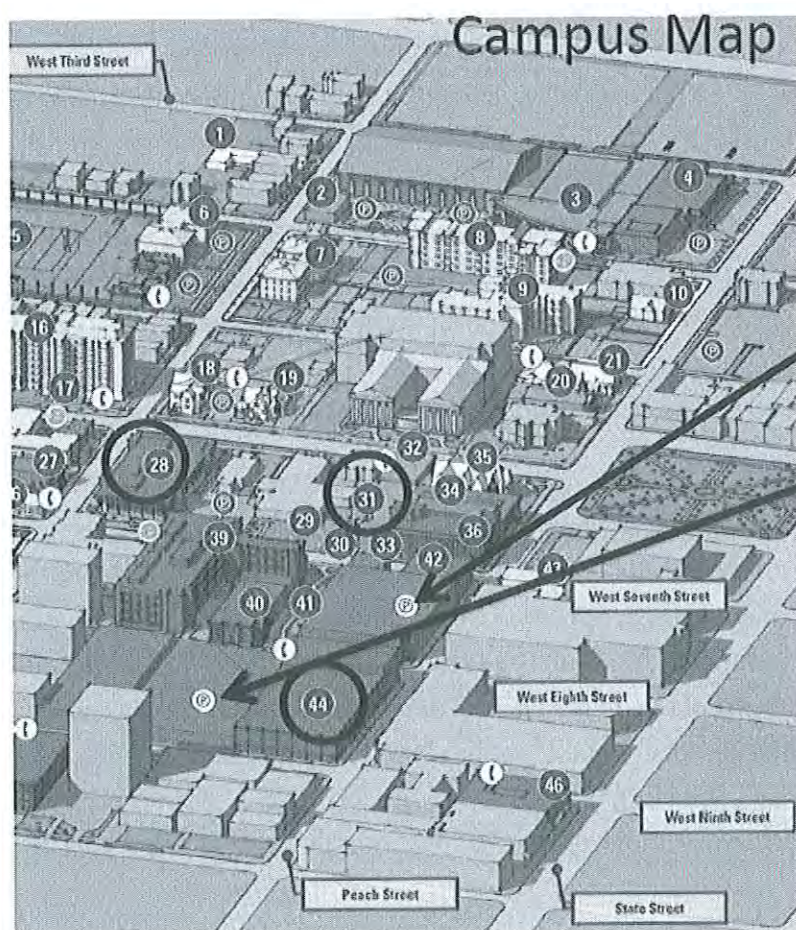
44TH ANNUAL
Western Pennsylvania
Undergrad Psychology Conference

SATURDAY, APRIL 16, 2016

GANNON UNIVERSITY

Table of Contents	
Schedule and Campus Map.....	2
Keynote Speaker.....	3
Poster Session.....	4
Paper Sessions	
Neuroscience/Emotion.....	23
Cognitive.....	24
Interpersonal/Social.....	26
Developmental 1.....	28
Developmental 2.....	29
Clinical.....	30
Personality.....	32
Author Index.....	34
Acknowledgements.....	35

Event	Time	Location
Registration	8 - 9	Waldron Campus Center Landing outside of Yehl Ballroom
Breakfast	8 - 9	Waldron Campus Center Landing outside of Yehl Ballroom
Poster Session	9-10:30	Waldron Campus Center Various locations on the 2nd floor
Keynote Address	10:45-12:00	Yehl Ballroom
Lunch	12-1:00	Yehl Ballroom
Paper Sessions	1:15 - 2:45	Second floor of the Palumbo Academic Center



31 Waldron Campus Center
(Registration, Posters, Lunch,
Keynote Speaker)

44 Palumbo Academic
Center
(Paper Sessions)

28 Nash Library (Post
Secret)

Public Parking. Enter on Peach
St. (Note that Peach is One-Way
going north)

Public Parking. Enter on 8th
or 9th St. (Note that 8th is One-
Way going east)

Other Landmarks:

- 40 130 West Eighth St.
- 36 Boyer Hall
- 46 Center for Business Ingenuity
- 42 Center for Communication and the Arts
- 15 Forensic Investigation Center
- 28 Nash Library
- 44 A. J. Palumbo Academic Center
- 45 Robert H. Murosky Academic Center
- 27 Schuster Theatre/Scottina Hall
- 39 Zurn Science Center
- 31 Waldron Campus Center
- 41 A.J.'s Way
- 29 Friendship Green
- 30 Gonson Arch

Keynote Speaker

Dr. Jeanette Bennett

Assistant Professor
University of North Carolina,
Charlotte



Entering college at Gannon University, I planned on becoming a MD - even conditionally accepted into medical school. However, through my then minor in psychology, I found my passion: psychoneuroimmunology (PNI) and health. I decided to double major in biology & psychology and set course for a career in research. Before applying to graduate programs, I developed my skills in both academia- and industry-based research environments. In Fall 2005, I began training with Laura Cousino Klein, PhD at Penn State and earned my MS (2007) and PhD (2010) in Biobehavioral Health. During my postdoctoral fellowship, I worked under the tutelage of Janice Kiecolt-Glaser, PhD in the Institute for Behavioral Medicine Research at Ohio State's Wexner Medical Center. Although I enjoy conducting research, I also learned that I love to teach and sought a research/teaching professorship.

In August 2012, I joined UNC Charlotte as an assistant tenure track professor of Psychology and Health Psychology and created StressWAVES BRL. The underlying concept driving my research lab is that multiple complex adaptive systems constantly interact to increase survival and maintain balance (e.g., homeostasis) or alter their functioning creating a "new normal" (e.g., allotasis). I primarily focus on the bidirectional neuroendocrine-immune communication due to the influence of both internal and external stressors that our bodies must constantly respond to. We can observe how human factors like the psychological (e.g., stress, depression), biological (e.g., sex, drug use, age), and psychosocial (e.g., socioeconomic status, social support) experiences will ultimately get "under the skin" and affect overall health.

Poster Session – 2nd Floor of Waldron Campus Center

1. Working Memory Under Pressure: Working Memory Measured Under Different Conditions
Rayan Abdalla and Jennifer M. Rockwell (Dr. Victoria Kazmerski, and Dr. Dawn Blasko)
Penn State Erie, The Behrend College
Pressures introduced while performing a task can use up working memory and hinder one's performance. Adding on stereotype threat can increase the pressures of working memory. Stereotype threat can increase the pressures more than the monitoring or outcome groups. Participants were randomly assigned to three groups (Monitoring, outcome, control). Completed the stereotype threat task, and ended the study with the mindset and anxiety test. Half of these groups (monitoring, outcome, and control groups) received stereotype threat or no stereotype threat, thus a total of 6 conditions. Previous research, has found that both the monitoring and outcome pressures groups, can help explain the increase in the use up of working memory (DeCaro et al., 2011). However, they did not show if stereotype threat can increase the pressures in the monitoring and outcome groups. It was found that both the monitoring and outcome conditions decreased working memory capacity. Participants in the non-stereotype threat condition had a higher score on the digit span task than those in the stereotype condition. The main goal of the study was to understand the different factors that can influence working memory and math performance, such as anxiety and one's mindset view of intelligence.
2. Bottled Water Use as an Indicator of Campus Sustainability Health
Stephen Armstrong (Dr. Milene Morfei)
Wells College
Climate change is a concern in our society today. Yet, how do we, as individuals, communities, and organizations, come together not just to acknowledge sustainable behaviors but to act and, more importantly, to maintain these behaviors? The focal point of my research emphasizes the importance of psychology and its role in sustainability issues. In addition, my research also demonstrates how corporations deceive consumers into believing bottled water is vastly superior to tap water. Hopefully this revelation will change the behaviors of consumers. My research explores the environmental impact of single-use plastic water bottles and discusses other issues such as the concern for the privatization of water, the economic factors involved with water consumption, and the health and well being of consumers and communities. Finally, practical solutions will be recommended based on the benefits of implementing new procedures for providing drinking water on our college campus.
3. Measuring sexual aggression-related implicit theories: Belief in the unknowability of the opposite sex
Richard Belz and Elayna Kinney (Dr. Darrin Rogers)
State University of New York at Fredonia
A belief that the opposite sex is fundamentally unknowable is an apparently-innocuous implicit theory (IT) theorized to predict sexual aggression. Direct measures of this IT are currently lacking, and it is unknown to what extent the current understanding of female sexual coercion

and aggression might be informed by a parallel construct. The current study was a preliminary attempt to validate self-report scales of implicit theories that women (WFU) and men (MFU) are fundamentally unknowable. Undergraduate volunteers responded to an anonymous online survey including pools of 30 items each written to assess WFU and MFU. Exploratory factor analysis was used to identify a coherent subset of items from the two pools to create psychometrically consistent scales to assess WFU and MFU. Correlations between the resulting scales and the correlate measures noted above were assessed for initial indications of construct validity. Implications of results and suggestions for future analyses are discussed.

4. The relationship between cortisol and the fading affect bias

Colby Bennett, Gionna DiMarco, Damali Donovan (Dr. Jessica Hartnett)

Gannon University

This research examined a possible correlation between the Fading Affect Bias and cortisol levels, in which undergraduate students (N = 40) at a private Catholic liberal university participated. Fading affect bias research has demonstrated that the emotions prompted by negative events typically fade faster than the emotions prompted by positive events. This leads to the comparative preservation of positive emotions over negative emotions in event memory. Memory research has also found that cortisol production in response to stress diminishes the ability to create and recall memories. As such, we are interested in seeing how negative event memories influence cortisol production versus how positive event memories influence cortisol production. To do this, we had participants think about two different memories: one positive and one negative and provide information about each memory as well as a cortisol sample via saliva. Findings and future directions will be discussed, as this research allows for a better understanding of the mechanism behind the fading affect bias.

5. The Relationship Between Frustration and Color

Colby Bennett (Dr. Luke Rosielle)

Gannon University

The purpose of our study is to investigate the relationship between frustration and color on a word search task. We provided two word searches: one that was possible to complete and one that was impossible to complete. The participants were given the word searches on either a white, red, or a green sheet of paper. Each participant was given five minutes to complete each word search individually. After completing the word searches, each participant rated their frustration level. We want to see if there is a relationship between frustration levels and different colored backgrounds of paper.

6. Is Personality Related to Beliefs about Animals' Consciousness?

Kristina Brotzman (Dr. Chris Niebauer)

Slippery Rock University

This study looks into the relationship between personality and beliefs about animals consciousness. Participants were asked questions pertaining to their beliefs about various levels of awareness certain animals may possess. A simple correlation was conducted and found significant correlations between beliefs about animals levels of awareness and pets that

participants personally owned. Those who were more Open or Agreeable were more likely to believe animals were more aware than not. For future studies, I'd like to reach a wider variety of students and examine beliefs about a wider variety of animals.

7. Hostile and Benevolent Sexism, Belief in a Just World, and Rape Myth Acceptance in a Female, Hispanic Sample

Sara Butler (Dr. Darrin Rogers)

SUNY Fredonia

Previous research has indicated associations between Rape Myth Acceptance (RMA) and Benevolent Sexism, and between Hostile and Benevolent Sexism. These studies further imply that the link between RMA and Benevolent Sexism may be mediated by an individual's Belief in a Just World (BJW), but have seldom examined females exclusively. By analyzing levels of Benevolent and Hostile Sexism, RMA, and BJW in a Hispanic, female sample, the current study aims to add to existing research, and is unique in that it targets a specific demographic. It is hypothesized that within this sample, a significant association will be observed between Hostile and Benevolent Sexism, and that each of these dimensions will be associated with increased RMA. In addition, BJW is expected to augment this relationship, and correlate with Benevolent Sexism. These associations are expected to be more strongly observed in women who hold beliefs more consistent with traditional Hispanic gender roles.

8. What Leads to Sexism? The Implications of Traditional Masculinity and Self-Concept Clarity

Taylor Casteel (Dr. Stephanie Richman)

Westminster College

The current study examined sexism after gender role and self-concept clarity were measured and perceptions of masculinity were manipulated. Eighty-one undergraduate students completed questionnaires to measure their masculinity, self-concept clarity, and sexism. Participants' masculinity was manipulated by having them wear a "feminine" or "masculine" apron. I hypothesized that wearing a "masculine" apron and adhering to traditional masculinity would lead to higher levels of sexism in men and women and this would be mediated by higher self-concept clarity. One-way ANOVAs and regression were used to analyze the data. Results showed that there was no difference between wearing the masculine and feminine aprons on levels of sexism. However, adhering to traditional masculinity predicted higher levels of hostile, benevolent, and neo-sexism. Traditional masculinity was found to be a strong indicator of high sexism. Ideas for future research include finding successful ways to temporarily manipulate perception of gender role.

9. The Relationship between Social Media, Body Dissatisfaction and Exercise behavior of Males.

Alex Ciorra (Dr. Lauren Paulson)

Allegheny College

Body dissatisfaction research has placed large emphasis on the female body but recent studies have discovered evidence of male body dissatisfaction as well. The current study examined the relationship between body dissatisfaction, social media usage in addition to fitness and exercise

behavior. Past research found that males who experienced exposure to the ideal male body image also showed higher body dissatisfaction compared to individuals who were not exposed, providing a plausible link between fitness related social media and body dissatisfaction. Those two measures were represented by the Revised Male Body Attitudes Scale and self-reported average number of hours per week spent using social media to view fitness related material, respectively. The dependent variable of the study is exercise behavior and will be measured by the Godin Leisure Time Exercise Questionnaire. Although past research has shown interactions between exposure to the ideal male body image and exercise and body dissatisfaction among participants, multiple regression analysis did not indicate any significant results. However, there was a main effect between social media usage and body dissatisfaction.

Key Words: body dissatisfaction, exercise behavior, social media usage

10. The Effect of Frustration on Unethical Behavior

Laura Cottingham (Dr. Lydia Eckstein-Jackson)

Allegheny College

There is little research exploring the effects of situational frustration directly on unethical or immoral behavior. 36 undergraduates were recruited to participate in the current study, measuring the effects of a frustrating situation on unethical behavior, specifically cheating behaviors. Frustration was manipulated and defined through a dice-rolling game paradigm first implemented by Paul Piff (Piff, 2014). The paradigm was carried out through the design of a computer program, which played an ostensibly random dice game for each participant. The participants played three rounds, as they were informed that the third and final round only would count towards their rewards for participation. The participants were randomly assigned to one of the two experimental conditions; in the frustrating condition, participants rolled two rounds exactly the same as the non-frustrating control condition, but in the third and final round, the frustrating group rolled almost half what the non-frustrating group rolled. This "bad" round of rolls, which counted for compensation, was defined as the frustrating factor. The measure of cheating was defined as reporting in the computer program as scoring a higher total in the third round than the participant actually rolled. Results indicate contradictory conclusions. Cheating occurred equal amounts of times between conditions, and the manipulation of frustration was not successful.

11. Intercultural Friendship Formation: The Effect of the Interpersonal Closeness Paradigm on Enhancing Interpersonal Closeness

Vy Dang (Dr. Lydia Eckstein-Jackson)

Allegheny College

Based on contact hypothesis (Pettigrew, 1998), the purpose of this study was to induce interpersonal closeness between domestic and international students via high intimate conversations using Interpersonal Closeness Paradigm (Aron et al., 1997). The study was a 2 (Intimacy: High vs. Low) x 2 (Background: Domestic vs. International) between-subject, factorial design. Twenty-three undergraduate students were asked to have a conversation with another student (an experimental confederate). Besides closeness, other factors such as future contact interest, inclusion of others in self, talking-partner attributions were measured. Results indicated that participants who discussed on closeness-generating topics felt closer to their

talking partner than those who had small talks. The present study has implications in expanding the understanding of contact hypothesis on an intercultural level and promoting domestic-international intervention programs and relations. Suggestions such as enlarging sample size, having control over domestic identity, stereotype focus were discussed as possibilities for further studies.

12. Effects of Race and Gender on Perceptions of Intelligence and Aggression

Katelyn DeChard and Taylor Kunkes (Dr. Darrin Rogers)

State University of New York at Fredonia

There has been a great deal of research focusing on how gender or race may impact perceptions of intelligence or aggression, but little research examines all of these factors together. A 2X2 between-subjects mixed factorial design was created in order to determine if any relationship exists. Participants read one of four vignettes, each featuring either a Caucasian male, African-American male, Caucasian female, or African-American female, and then answered questions derived from the Buss-Perry Aggression Questionnaire and the Sternberg Conceptions of Intelligence Questionnaire. It is expected by the researchers that African-American males will be perceived as more aggressive, followed by Caucasian males, African-American females, and Caucasian females respectively. It is expected that Caucasian females will be viewed as most intelligent, followed by Caucasian males, African American females, and African American males.

13. How Comfort Food Affects Pain Tolerance

Samantha DiCaprio (Dr. Stephanie Richman)

Westminster College

Comfort food is used to soothe social pain, but there is no research on whether it soothes physical pain. This experiment tested whether comfort food increases pain tolerance during the cold pressor task and the effects of attachment style and emotional eating on this relationship. Participants were randomly assigned to the control condition, in which they just did the cold pressor task, the social condition, in which they looked at a picture of a loved one while doing the cold pressor task, or the comfort condition, in which they ate comfort food while doing the cold pressor task. Participants also completed the attachment style and emotional eating scales. We found that the comfort and social groups had higher pain tolerances than the control group. We also found that there was no significant difference in pain tolerance between secure and insecure attachment styles, nor did emotional eating have an effect. These findings suggest that comfort food can soothe physical pain.

14. The Effects of Music on Typing Accuracy

Katelyn Pegher and Gwendolyn Dryer (Dr. Melanie Hetzel-Riggin)

Penn State Behrend

Music disrupts working memory capacity, due to an overload when completing cognitive tasks (Thompson, Schellenberg & Letnic, 2012). Additionally, listening to music can hinder typing fluency by 60 words per minute on average (Ransdell & Gilroy, 2001). The effects of music on typing accuracy was investigated in undergraduate psychology students at a Northwestern

University. Each participant was assigned to a typing test order and were tested on their typing ability. Each participant was required to listen to each of the four music groups: (1) classical, (2) pop, (3) rock, and (4) no music (control). The hypotheses were that no music will result in the least amount of typing errors, and that hard rock will result in most amount of typing errors. None of the hypotheses were supported. However, rock music was found to produce significantly more words per minute than any of the other genres. Thus, it can be a possibility of typing faster but not necessarily typing with accuracy.

15. Gun Familiarity and its Impact on the Weapon Focus Effect and Eyewitness Testimony

Ryan Dunn (Dr. Stephanie Richman)

Westminster College

The weapon focus effect distracts eyewitnesses from crucial details of crimes, distorting their memories and contributing to eyewitness testimony's unreliability. The present study examined the impact that gun familiarity has on the weapon focus effect and eyewitness memory. Gun novices were placed into one of six different conditions, where gun-familiarization and various mock crimes differed. Participants' eyewitness credibility was based on the accuracy of free recall details, selection of perpetrators, and confidence ratings. I predicted that increasing gun familiarity would reduce a weapon focus effect. Unusual presentations of the perpetrator's weapon was also expected to influence a weapon focus effect. A main effect on the mock crimes and the participants' free recall confidence ratings was found. Additionally, participants witnessing a crime with a gun were less likely to select the correct male perpetrator compared to a crime with no gun. Future research, improving upon minor limitations, aim to find a potential source of improvement within eyewitness testimony by reducing the weapon focus effect and improving eyewitness memory credibility.

16. Test of a Holistic Model of Needs and Healthy Romantic Relationships

Holli Erkson (Dr. Deborah Gagnon)

Wells College

Inter-personal relationships are created based on the needs of each individual. Maslow (1943) envisioned a hierarchy of needs including basic needs, security, love & belongingness, self-esteem, and self-actualization. An alternative model envisions these needs as inter-connected and holistic. The present study tests this alternative conception. In this study, the degree to which each need is met for each partner in a romantic relationship was measured using validated scales. The degree to which satisfaction level of needs are matched between partners was predicted to determine the health of the romantic relationship. The research also explored the idea that if all needs are met for both individuals in a romantic relationship, it will have reached its full potential and will be sustaining. The hope of this research is that developing a holistic model of needs and romantic relationship will help guide individuals in actualizing their own healthy romantic relationships.

17. Verbal Behavior acquired via Free Learning Module: Analyzing Individual History Differences in Learning Basic French Verbal Behavior using Duolingo

Brianna Fowler (Dr. Rodney Clark)

Allegheny College

Verbal behavior history differences were examined in learning the Basic French 1 skill on the free online learning module Duolingo. Participants were 20 bilingual and 20 monolingual liberal college students, ages 18-22, who had no previous knowledge of the French language. Participants completed the Basic French 1 skill then took a brief quiz. Quiz scores were compared to participants' native language, proficiency of more than one language, and fluency of more than one language. No significant correlations were found between participants' quiz scores and native language, proficiency or fluency of more than one language. These findings suggest that monolinguals and bilinguals learn the Basic French 1 skill on Duolingo in under 20 minutes with the same level of facility.

18. The Relation between mindfulness, self-consciousness and emotional tone of dreams

Milo Freese (Dr. Chris Niebauer)

Slippery Rock University

The current study investigated the relationship between mindfulness, self-consciousness and dreams. Very little research has been conducted on the relations between the 3 variables used in this study. This study investigated the relationship between emotional tone of dreams, the dark tetrad of personality and parenting styles (can you check this..I can't recall if we still measured par style. The current study hypothesizes that high measures of mindfulness will correlate to private self-consciousness as well as a positive emotional tone in dreams.

19. Activation of the 5HT1A serotonin receptor reduces impulsivity in rats

Rachel Hardy (Dr. Peter McLaughlin)

Edinboro University of Pennsylvania

Impulsivity plays a central role in many psychiatric disorders and in itself can be a rash and dangerous trait. We sought to examine the role of the serotonergic 5-HT1A receptor in this type of behavior by measuring impulsivity in rats using a novel variable consecutive number schedule with discriminative stimulus (VCN-SD). This task was designed to control for time perception or working memory alterations that confound other impulsivity models. The hypothesis was that WAY 100,635 (WAY), a 5-HT1A antagonist, would increase impulsivity, while the 5-HT1A full agonist 8-OH-DPAT would decrease it, and that this would be blocked by WAY. 8-OH-DPAT substantially reduced impulsive responding, an effect blocked by WAY, which had no effect on impulsivity alone. The VCN-SD task has therefore shown itself to be a valid tool in the field of animal impulse control research and, though sensitive to the same pharmacological probes as others, it is not likely to be sensitive to changes in time estimation or other cognitive processes, unlike other tasks.

20. Increased Cardiovascular Reactivity to a Social Stress in College Students with Traits Associated with High Functioning Autism Spectrum Disorder

Mariah Hildebrand (Dr. Sarah Conklin)

Allegheny College

College students with high functioning autism spectrum disorder experience physiological stress when interacting in a social situation. Separate literature suggests greater cardiovascular

reactivity to a social stressor can lead to many health complications including increased risk for cardiovascular disease morbidity and mortality. The current study examined cardiovascular reactivity during a 30-minute, modified Trier Social Stress Test in 50 college students with varying scores on the Autism Spectrum Quotient and how a scripted intervention affected reactivity. It was found that cardiovascular reactivity increases as Autism Spectrum Quotient score group increases for speech mean arterial pressure, speech pulse, and math pulse for the scripted condition. The scripted and unscripted conditions did not significantly differ in cardiovascular reactivity, however participants in the scripted condition had a lower level of self-perceived stress. Therefore, individuals with high functioning autism spectrum disorder may be at a greater risk for cardiovascular disease morbidity and mortality than their neurotypical peers. The findings of this study may be helpful to postsecondary educational institutions for improving the health and quality of life of their students.

21. Effects of 4-OH-DET on Preservation of Ethanol-Seeking Behavior

Matthew Horchar (Dr. Rodney Clark)

Allegheny College

This study examined the effects of 4-HO-DET (4-hydroxy-diethyltryptamine; ethocin) on extinction of ethanol-seeking behavior in Sprague-Dawley rats ($n=5$). The rats were initially exposed to intermittent twenty-four hour access to 20% (v/v) ethanol (ETOH) solution for two months to induce high levels of oral self-administration. Once the propensity to self-administer ETOH at levels consistent with human alcohol abuse was established, the rats were trained to respond for ETOH reinforcer via lever presses in an operant conditioning chamber. Baseline levels of ETOH-seeking behavior were established within a month. Rats were placed into either a group that received an injection of 8 mg/kg 4-OH-DET (IP) or a control group that received vehicle (DMSO) injection (IP). Preservation of ETOH-seeking behavior was measured under extinction conditions. Administration of 8 mg/kg 4-OH-DET led to an observable, though not statistically significant ($p=.05$), decrease in ETOH-seeking behavior.

22. The Effects of Music Tempo on Selective Attention

Bethany Jamison (Dr. Patricia Rutledge)

Allegheny College

Previous research has shown different music tempos can have different effects on cognitive performance. Specifically, fast-tempo has been shown to increase response times and decrease errors. Due to the fact that brain regions activated during selective attention heavily overlap with regions also involved in music processing, the current study sought to see if previous findings held true for selective attention tasks. Participants ($N = 35$) were randomly assigned to a slow-tempo, fast-tempo, or silence condition and completed the Stroop task. Results did not support the hypothesis that participants in the fast-tempo condition would make the least amount of errors and complete the task fastest. Two separate one-way ANOVAs showed the fast-tempo group made significantly more errors and the slow-tempo group completed the task significantly slower than the control group. These results suggest that music tempo may impact selective attention tasks differently than other tasks, potentially due to overlapping brain regions involved.

23. Foreign Language Acquisition through Single-Trial and Traditional Learning
Kira Kitchen (Dr. Matthew Weaver)
Mercyhurst University
The purpose of this study was to replicate prior literature done on both single-trial learning and traditional learning, as well as to expand on literature dealing with foreign language acquisition. This study looked to see if there was a difference in assessment scores between groups when taught a foreign language with both learning styles, and to see if there was a difference in the amount of words retained between both learning styles. Twenty-six words and phrases from the Spanish language were used within the confines of this study in order to determine if there was a difference in acquisition rate and to assist in validating prior literature.
24. Gender Biases and Attitudes Regarding Differences
Spencer Knafelc (Dr. Chris Niebauer)
Slipper Rock University
A previous study has shown that when one has the knowledge of an individual being transgender, they will perceive them as being less attractive had they not had such knowledge (Sharo et al, 2015). This study, as well as others, demonstrate an existing bias against transgender individuals (Bradford et al., 2013; Cruz 2014). Furthermore, it has been demonstrated that men are more likely to display bias against transgender people than women (Norton & Herek, 2012). This study's aim is to replicating these findings as well as assessing attitudes toward whether gender and behaviors associated with gender are a social construction, or if they are rooted in biology.
25. Directed Forgetting Using the Release of Proactive Interference Paradigm: Taking a Break or Actively Forgetting?
Halley Kottwitz and Hannah Ruby (Dr. Michael Skelly)
Edinboro University
Evidence for directed forgetting in working memory has been shown by inserting a remember or forget cue between trials 3 and 4 in a modified release of proactive interference (RPI) paradigm (Zimmerman, 2014). Specifically, Zimmerman's results indicate a significant RPI occurred for trial 4 items when participants were cued to forget versus remember items presented in trials 1-3. However, Zimmerman did not control whether the benefit of the forget cue was due to participants resting from the task or from their ability to forget items. Accordingly, the present experiment introduces a baseline in a 3 x 4 mixed design that examines the effect of cue type (forget, remember, baseline) and the effect of trial (Trials 1-4) on the proportion of words recalled correctly in an RPI paradigm. Preliminary findings indicate the forget cue benefit may be due to resting from the task and not the forgetting of trial items.
26. Dark tetrad in predicting sexual coercion and aggression in female students
Taylor Kozuch, Brooke Park, Jacquelyn Wertel (Dr. Darrin Rogers)
State University of New York at Fredonia
The dark tetrad, a cluster of self-serving personality traits (narcissism, Machiavellianism, psychopathy, sadism) has been found to predict sexual aggression and coercion in males. Some

research has also found this relationship in females though this literature is not as well developed, and the relationships among these predictors in women have not been explored. Female undergraduate students were administered an online survey including measures of the dark tetrad and self reported sexual aggression and coercion. Associations between individual dark tetrad scales and measures of sexual aggression/ coercion will be assessed followed by exploration of relationships among dark tetrad characteristics in their impact on sexual coercion. Results will be discussed in light of public perception of gender and aggression as well as prevention of sexual coercion.

27. The Effects of Caffeine on an Ethanol-treated Rat's Completion of an 8-arm Radial-Arm Maze

Antoinette Lee (Dr. Rodney Clark)

Allegheny College

The co-consumption of alcohol and caffeine is an increasingly popular trend amongst young adults and has sparked new research regarding the behavioral and neuropharmacological effects of this combination. This experimental study utilized rats to test the effects of caffeine on the negative behavioral and psychomotor effects observed during alcohol consumption. The rats were trained to successfully complete a discrimination eight-arm radial arm maze test. Then the rats were given ethanol (EtOH) and tested to observe any disturbance in the rat's behavior. Caffeine was then administered with the EtOH and the rats were tested again to observe the possible effects the caffeine might have on the ethanol. The results of this experiment showed that the co-administration of caffeine and ethanol appeared to reverse the alcohol-induced impairment but also decreased the speed of the rats' responses. These findings suggest that caffeine may have some antagonizing effect on how ethanol effects behavior.

28. The Effects of a Self-Management Program On Increasing Exercise in the Home: A Single-Subject Study

Alexandra Leopold (Dr. Sharon Hamilton)

Edinboro University

The present study evaluated the effectiveness of a self-management intervention used to initiate physical activity within the home of a working mother. With the use of a changing criterion single-subject design, frequency of exercise was measured throughout the course of seven weeks. Procedures evaluated included weekly and daily goal-setting, immediate and delayed rewards distributed through a token economy, as well as the implementation of antecedent control regarding exercise. A behaviorist approach was adopted, in an attempt to reshape existing behaviors and form new ones.

29. #BodyGoals: The Impact of Instagram on Collegiate Women's Body Image

Alyxandra Mance (Dr. Lauren Paulson)

Allegheny College

The use of social media is pervasive and growing rapidly every single day worldwide. Past research has evaluated how media such as television and magazines affect the body image of consumers. Within the past 15 years, research has shifted to include how social media

applications affect body image. However, new and different applications are created daily creating gaps in this field of research. Photo-centric social media applications are the newest category. These applications provide users with a way to dive into the lives of others through photographs only. The most popular photo-centric application is Instagram. The purpose of the current study is to investigate whether viewing body-centric Instagram posts will cause a negative change in body image in collegiate women. A manipulation was used where participants either viewed a body-centric Instagram feed or a neutral Instagram feed. Results found that women who viewed the body-centric Instagram feed reported significantly lower body image states compared to women who viewed a neutral Instagram feed.

30. The Effects of Phencyclidine and Haloperidol on Schizophrenic-like Symptoms and Behavior in Rats

Kathryn McMurray (Dr. Rodney Clark)

Allegheny College

While the exact causes of schizophrenia are still not known, one hypothesis is that an altered level of glutamate in the brain causes the disorder. Phencyclidine (PCP) induced psychosis has been studied in both humans and animal models. Rats were trained under an interresponse time schedule in a conditioning chamber. They were given three different doses of PCP to see how it affected the average rate of lever pressing. The highest dose of PCP used in this study was paired with the antipsychotic haloperidol to see if the behavior went back to baseline. The results of this study indicated that two of the doses of PCP significantly changed the average rate of lever pressing. There was no significant difference between the third dose of PCP and when that dose was paired with haloperidol, indicating that haloperidol did not cause the average rate of lever pressing to return to baseline.

31. The Effects of Sleep Deprivation and Scene Complexity on a Change Detection Task

Joshua Mongillo (Dr. Aimee Knupsky)

Allegheny College

The main goal of this study was to assess the effects of sleep deprivation and scene complexity on change detection performance. This included how sleep deprivation and scene complexity effected reaction time in finding a change, number of fixations in an area of interest, time until first fixation in area of interest, percent correct in change detection task, and difficulty rating of scenes. A 2x2 mixed model design was used with sleep deprivation (less sleep deprived vs. more sleep deprived) being the between subjects variable and scene complexity (urban vs. nature) being the within subjects variable. Using a gap-contingent change detection task, participants were asked to view 20 pairs of images that had an object changed in the scene, find the change, and rate the difficulty of finding the change. Participants were also recorded on their accuracy of finding the correct change and were also calibrated to an Eye Track 7 eye tracker to record fixations. Results showed that participants took longer to register a change in urban scenes, have a higher accuracy in finding the change in nature scenes, and reported urban scenes to be more difficult. As for the eye tracker data, there were malfunctions with the unit so only eight participants had usable data. However, this data suggested that participants viewing urban scenes had more fixations in the area of interest than when viewing nature scenes. There were no significant results involving sleep deprivation. These results suggest that nature scenes have

restorative effects on selective attention and that scene complexity and content is vital to the amount of selective attention used.

32. The Effects of Music on the Direct Measures of Impulsivity in Adolescent Males with Severe Behavioral and Emotional Disturbances

Meghan Mooney-Ryan (Dr. Matthew Weaver)

Mercyhurst University

Music is a universally experienced stimulus that evokes a multitude of emotional responses, which include fear, relaxation, happiness, sadness, and exhilaration. As such, listening to pleasurable music has the potential to indirectly affect behavior. The aim of this study was to determine whether or not subject-chosen music would have an effect on impulsive decision-making in youths with behavioral and emotional disturbances, which stem from ADHD. This was completed by utilizing a delay discounting computer program and subject-created playlists. Prior to completing the delay discounting task, the subjects listened to their chosen songs for two and a half minutes with out interruption. After the time limit was up, they completed the delay discounting program while continuing to listen to their music. The delay discounting results with music were then compared to their baseline measures of impulsivity. Ultimately, there was not a significant difference in delay discounting results. However, both of the baseline and experimental results indicated high levels of impulsivity within this population.

33. Attitudes about Counseling

Mark Mullins and Ann Smeltzer (Dr. Luke Rosielle)

Gannon University

A poster describing the biases toward counseling and medical professions will be presented. It is widely assumed that, despite the importance of both mental and physical health, mental health issues still face a stigma in society. The purpose of this study is to investigate this stigma. Because social desirability might be an issue in investigating people's negative attitudes, we chose to look at both conscious and implicit attitudes. In this study, we first examined how people view counseling professions through a small self-report questionnaire. Then, we measured people's implicit attitudes toward counseling and medicine through the Implicit Association Test. Participants were asked to associate positive and negative words with words representing the counseling and medical professions. We predict that if people hold a negative view of counseling, they should be slower to pair counseling with positive words and faster to pair counseling with negative words. The results will provide evidence of people's implicit view of counseling in a way that does not rely on explicit self-report."

34. An Analysis of Hook-Up Culture and Young People's Attitudes Towards Long-Term Commitment

Abigail Niklaus (Dr. Lydia Eckstein Jackson)

Allegheny College

This research project examined contemporary "hook-up culture". In modern culture hooking-up, meaning engaging in sexual behaviors with no commitment, has become the norm not only on college campuses but also for the young adult population as a whole. Young adolescent culture

has strayed away from the traditional steps and ideology of dating monogamously and has arrived at a more casual form of intimacy, lacking commitment. This new trend increases the chances of STDs, unplanned pregnancy, and physical and psychological distress. This research included an online survey taken by 145 participants, which asked questions about the individuals' attitudes towards marriage and their engagement in hook-up culture. This research aimed to fill the population gap from previous research by surveying both students in undergraduate school, graduate school, and not in any schooling. Results did not support the hypothesis that engagement in hook-up culture and attitudes towards marriages would be related. Additionally, results showed no significant difference between individuals' engagement in hook-up culture amongst young people enrolled in different levels of schooling. Further research is necessary to examine the correlates to the contemporary marital delay.

35. Treatment of Academic Procrastination in College Students

Annie Olczyk (Dr. Sarah Markowitz)

Wells College

Procrastination is an epidemic among college students nationwide and is one reason for academic failure, yet there is currently no gold-standard treatment. The current study evaluated a structured group treatment program for academic procrastination. The treatment involved a 60-minute session once each week. Each session was structured to include a different lesson every week during the first portion of the session; participants then applied what they learned to their academic work for the second portion. The participants took the Procrastination Assessment Scale for Students (Solomon & Rothblum, 1984) to assess their procrastination levels during both the first and last session. To be considered successful, the participants had to show significantly lower procrastination levels during the last session compared to the first, as determined through statistical analysis.

36. Relationship Between Athlete Personality Traits and Preferred Coaching Behaviors at the NCAA Division III Level

Emma Pellicano (Dr. Lauren Paulson)

Allegheny College

The present study seeks to relate the big five personality traits of athletes to their preferred coaching behaviors in team sports at Allegheny College. The Mini-International Personality Item Pool (Mini-IPIP) was distributed to assess athlete personality traits and the Revised Leadership Scale for Sports (RLSS) was given to record their coaching behavior preferences. The primary analysis consisted of correlating three of the five big five personality traits (Extraversion, Neuroticism and Openness) to each of the six RLSS preferred behavior dimensions (autocratic, democratic, positive feedback, situational consideration, social support, and teaching and instruction behaviors). Results showed a significant relationship between openness and positive feedback coaching behaviors. A secondary analysis tested differences in gender to the six subscales of coaching behaviors, as well as correlating Conscientiousness and Agreeableness to the six coaching behaviors. Agreeableness was significantly related to democratic and situational consideration preferred coaching behaviors and a significant gender difference was found.

37. Relationship Between Driving Style, Personality, and Behavior

Matthew Pleso (Dr. Chris Niebauer)

Slippery Rock University

The aim of the present study is to examine the relationship between an individual's driving style and the Big Five personality inventory. In driving, there are many social norms that we all abide to in order to create a more efficient roadway system. Things like stopping at stop signs, speed limits, and using turn signals when changing lanes or turning are a few examples of these norms. These social norms are not always followed. It is hypothesized that passive drivers will score higher than both neutral and aggressive drivers in conscientiousness while aggressive drivers will score higher than both neutral and passive drivers in both extraversion and neuroticism.

38. What Makes a Doctor Trustworthy?

Jamie Randall (Dr. Luke Rosielle)

Gannon University

The doctor patient relationship revolves around trust as patients are putting their lives and loved ones lives in the hands of a physician that patients hardly know. So what makes a doctor trustworthy? The purpose of this research is to investigate the specific factors which make a doctor trustworthy. In addition, I am interested in whether the trust level of a doctor makes patients more open and honest, which in turn could potentially lead to better care for the patient. Subjects were administered several scales measuring their trust of doctors. I am interested in which factors impact the trust level between the patient and the doctor. The research will be able to provide knowledge to help improve the healthcare system and close the relationship gaps leading to better experiences for both the patient and doctor.

39. Mock Jurors' Perceptions of Polygraph Tactics Used to Obtain a Confession

Joseph Ray (Dr. Ronald Craig)

Edinboro University

Confessions are a very powerful piece of evidence in the US judicial system. However, research indicates that legal interrogations tactics, like deception, increases the risk of a false confession. One tactic used in interrogations is the polygraph test where, regardless of the outcome, the suspect is told the test indicated deception. This study examines mock jurors' perceptions of this tactic in obtaining confessions. Participants read a mock-crime scenario where an interrogation leads to a recanted confession. Four versions were developed varying the use of the polygraph in the interrogation, the feedback the suspect is given, and its accuracy. Participants then determine guilt, importance of evidence, and completed the Confessions Attitude Scale. Demographic information, including knowledge about false confessions, was also obtained. Data will be analyzed to examine the impact of the tactic and feedback on the dependent measures. Results are discussed in relation to the tactics use in interrogations.

40. The Effect of Exposure to Organic Product on Immoral Behavior

Allyson Roach (Dr. Lydia Eckstein-Jackson)

Allegheny College

41 undergraduates were recruited to participate in the current study, which examined the

relationship between exposure to organic product and immorality. The exposure to organic product was measured using a self-made manipulation check, which was administered after exposure to organic or store brand product scenarios. Immorality was measured through the use of a number search task. Participants were asked to solve as many of the twenty matrices as possible, in the five-minute time frame provided. Results indicate participants in the organic product condition ($M=7.39$) solved more matrices than the participants in the store brand condition (5.87). While the difference between conditions was not significant, the average number of matrices solved was different and an effect could be found with greater sample size.

41. Exploring the experience of heroin and opiate users in a rural area

Alyssa Schneider (Dr. Lauren Paulson)

Allegheny College

Heroin and opioid pain reliever use within the United States has continued to grow over the past several years. In recent years, heroin abuse has shifted from urban to rural communities, which is exemplified in rural communities throughout the country. The danger of heroin and opioids lies in their extremely addictive qualities, and repeated heroin and opioid use changes the physiology of the brain with lasting effects. The goal of this study is to explore both the factors that contribute to heroin and opiate use, and the factors that helped the addicts stop using heroin or opiates. Participants were males and females from Crawford County who had been identified as addicts. Participants were interviewed and then given the ACE questionnaire to complete. Abuse and parent-child relationships were among the themes identified as being factors contributing to use, and internal motivation was found to aid in addicts abstaining from use.

42. The Bystander Effect in Non-Emergency Helping Situations

Allison Gage, Ashley Master, Emily Galeza, Elizabeth Seng, and David Campbell (Dr. David Herring)

Penn State Erie, the Behrend College

An event in which an individual needs assistance but does not receive it when others are present, is known as the bystander effect. Diffusion of responsibility is one explanation for the bystander effect, and occurs when an individual believes the other bystanders present will help the victim, so they do not help. Research on this phenomenon has primarily been focused on emergency situations such as sexual assault. However, minimal research has been conducted in non-emergency situations. Non-emergency situations need further research because having the knowledge of intervening in non-emergency situations may give individuals confidence when providing assistance in emergencies. Researchers will be dropping papers in multiple bystander conditions to analyze if the participant helps. The different conditions include a control condition, one bystander, or multiple bystanders present. Confederates will be trained not to respond. Researchers hypothesize that a larger number of bystanders present will negatively correlate with the likelihood of the researcher receiving help. The control condition, with no bystanders, should offer the most help.

43. Pet Affinity and Adjustment in First Year College Students

Alexis Sheffer (Dr. Mandy Medvin)

Westminster College

This study examined the quality of human-dog relationships and adjustment in first year students from a college in northwestern Pennsylvania. Pet affinity is the measure of the relationship an individual has with their pet. To be eligible for this study, participants must have owned a dog, been first year students in college and over the age of eighteen. One hundred participants completed self-report surveys that examined the quality of the relationship they had with their dogs as well as stress, depression and loneliness during the first month of adjustment to college. A demographic questionnaire was included in the packet and a mood repair question was optional for each participant upon completion of the packet. It was predicted that students with a higher quality relationship with their pet would report lower levels of stress, depression and loneliness during the first month of college. Findings indicated that contrary to predictions, no relationship was found between pet affinity and measures of stress, depression, and loneliness. Alternatively, higher levels of stress were associated with higher levels of depression and loneliness. Most college students reported moderate to high levels of pet affinity. Limitations of this study included self-report scales, only one college population completing the surveys and also the focus specifically on ownership of dogs. Further research might focus on manipulating individual's thoughts about their pet rather than the quality of the relationship. Overall, previous work indicated that pets can serve as social support and also aid in the lowering of blood pressure. As animal therapy is continuing to grow in popularity, colleges should give careful thought to implementing animal therapy programs to aid in adjustment.

44. The Relationship between Perfectionism, Alcohol Consumption, and Academic Motivation in Undergraduate Students

Lakiea Simmons (Dr. Lauren Paulson)

Allegheny College

Research looking into the combined influences of perfectionism, alcohol consumption and academic motivation as they relate to undergraduate students is relatively scarce; this study examines the combined and individual influences of these three variables in an effort to expand on the current research in this area. Seventy-five undergraduate students were administered three self-reported questionnaires: the Academic Motivation Scale, the Short Form of the Multidimensional Perfectionism Scale, and a quantity-frequency measure of alcohol consumption. The option to supply the previous semester's cumulative grade-point average (GPA) was also given. After multiple regression and correlational analyses, results revealed that self-oriented perfectionism was the strongest predictor of academic motivation compared to socially-prescribed perfectionism and alcohol consumption. It was also found that socially-prescribed and self-oriented perfectionism and amotivation negatively correlated with alcohol consumption, while extrinsic and intrinsic motivation positively correlated with alcohol consumption. Implications of these findings as well as suggestions for future research are discussed.

45. Relationship Between Body Dissatisfaction and Mate Value

Rose So (Dr. Lauren Paulson)

Allegheny College

It is important to understand how body dissatisfaction affects an individual, as it has many serious and detrimental mental and physical consequences. The ideal body for females has become thinner and thinner over many decades, and this thin ideal is constantly reinforced by various sociocultural influences. The ideal body for males has become more muscular over recent decades, this physique also being reinforced by sociocultural influences. The inability to reach these ideals often leads to body dissatisfaction. 50 Allegheny College students were studied to observe the relationship between body dissatisfaction and mate value. A significant relationship was found between the two variables, with high rates of body dissatisfaction resulting in lower rates of mate value. The strong relationship found between body dissatisfaction and mate value is an important one that adds to the previous research found on the abundance of negative effects body dissatisfaction has on different areas of life.

46. The Great Teddy Bear Rescue: A Pilot Test of a New Creative Problem Solving Task

Kailyn Soros, Kirstyn Quinn, Ashli Barron, Sam Nassan (Dr. Elizabeth Boerger)

Slippery Rock University

The goal of this study is to test a new task for measuring creative problem-solving in young children.

Method. Participants included 10 undergraduates and 10 children. Each completed two tasks, an empty box task and a box and objects task, that involved a boy (Alex) who needed to retrieve his teddy bear from a high shelf. In each task the participant was asked to describe as many ways that Alex could get the bear off the shelf that he/she could think of. The responses to both tasks were videotaped.

Planned Analyses. Descriptive statistics will be calculated for the number of solutions generated, number of types of solutions generated in each type of task, novelty of solutions, average realism, and average effectiveness.

Discussion: Data from this study will be used to develop a scoring method for the task and to make any necessary modifications to the task.

47. Perceptions of Law Enforcement and Civilian Interactions as a Function of Race and Gender

Emily Spain (Dr. Jack Croxton)

State University of New York at Fredonia

Based on current events, we wanted to investigate how people perceive law enforcement officer and civilian interactions. We were particularly interested in how their gender and race would impact people's perceptions when reading about an altercation. We created a scenario involving an altercation between a law enforcement officer and a civilian, which resulted in the civilian being shot. The gender (male, female) and the race (black, white) of the law enforcement officer and the civilian were altered. We assessed the amount of blame placed on each of them. We predicted that there would be greater blame placed on the officer than the civilian, especially when the officer was white and the civilian was black. In addition, we predicted that when there was a discrepancy of gender, there would be greater blame placed on the male than on the female. The results will be shared at the conference.

48. A Vote of Confidence: Effects of Confidence on Conformity in Eyewitness Testimony

Samantha Thomas (Dr. Sherri Pataki)

Westminster College

Conformity in recall has been found to prevent accurate eyewitness testimony. This study attempts to identify factors that enable eyewitnesses to resist conformity. It was hypothesized that individuals who received a confidence boost would be less likely to conform in an eyewitness testimony scenario. Sixty participants, 16 male and 44 female, were informed that their gender was either better or no different at spatial performance and memory. Participants completed a questionnaire, observed two pictures, and recalled items from the pictures while previous participant answers were available. Conformity was measured against the similarity in recall answers to those provided by previous participants. Participants who experienced a heightened sense of confidence were hypothesized to demonstrate a decrease in conformity. Results were non-significant and the hypothesis was not supported. Future studies should look to creating a more effective confidence boost and should implement a more realistic eyewitness scenario.

49. The effect of media portrayals on female viewers: The Superwoman Ideal

Meghan Veglia (Dr. Lauren Paulson)

Allegheny College

The endorsement of the Superwoman Ideal in response to specific written media exposure will be examined. Twenty-two undergraduate college women were randomly assigned to one of two groups; the Superwoman written media group or the Housewife written media group. Participants were exposed to one of the two groups, then were asked to take the Superwoman Ideal Survey established by Murnen, Smolak, & Levine in 1994. It was hypothesized that participants exposed to the Superwoman written media group will endorse the Superwoman Ideal significantly more than the participants in the Housewife written media group. However, the data that was collected suggested that there is no significant difference across groups. The limitations, implications, and suggestions for future research will be discussed. This study expands on the current research concerning media and endorsement of the Superwoman Ideal.

50. CAGED: A Comparison Across Mediums of System Justification

Amanda Warner (Dr. Lydia Eckstein-Jackson)

Allegheny College

This research was conducted to compare system justification and social activism across different performance mediums, specifically live performance and a video or footage medium. The first component comprised of a live performance that took place in a cage and a small theater, and the second was simply a recording of the original performance and it was screened in a classroom. Both were tested with the same surveys, the live performance had a pre-survey and post-survey, whereas the second component had a survey only after the screening. What was discovered was that people are more susceptible to doing something about injustice through live action. This is important in the world of community action and activism, and lends a hand to live action being more effective than footage as a medium.

51. The Relation between Inner-talk, Anxiety, and Metacognition
Robert Wellman (Dr. Chris Niebauer)
Slippery Rock University
The present study examined the relation between inner-talk, anxiety, and metacognition. There is a lack of research looking into how inner-talk relates to the latter two. This study is a replication and extension of a previous study conducted, which examined the relation between inner-talk and anxiety. It was hypothesized, for the present study, higher amounts of inner-talk would correlate with both higher anxiety and higher scores of metacognition. Overall, the hypothesis was supported.

52. Development of the Running and Problem Solving Questionnaire (RPSQ)
Melissa Winfield (Dr. Sharon Hamilton)
Edinboro University
"In our previous research we developed the Training Run Thoughts Questionnaire (TRTQ). The TRTQ was based in part upon Goldfried and D'Zurilla's (1971) stages of problem solving. The TRTQ also included items that reflected general associational and dissociational thinking, which are types of thinking that have been associated with running by researchers (Morgan & Pollack, 1977). We decided to revise the TRTQ for three reasons: First, we wanted to add several more items related to social problem solving; specifically, items reflecting a positive and negative problem orientation. Second, we wanted to drop all non-problem solving items in order to allow for the calculation of a summary score across items that primarily reflected the social problem-solving process. Third, we wanted to reevaluate our items and create new items after completing an updated literature review. The inventory we created from the TRTQ is the Running and Problem Solving Questionnaire (RPSQ)."

Paper Sessions – 2nd Floor of Palumbo Academic Center

Neuroscience/Emotion

Palumbo Academic Center, Room 2200

Talk Moderator: Dr. Luke Rosielle, Gannon University

Reciprocal connections between the mediodorsal thalamic nucleus and somatosensory and posterior parietal cortices in the macaque monkey.
--

Erica Evans (Dr. Melissa Heerboth)

Mercyhurst University

The mediodorsal (MD) thalamic nucleus is the principal source of thalamic input to the prefrontal cortex, with less robust projections to other cortical areas in the frontal lobe, such as premotor cortex. In this study, injections of a mixture of the retrograde tracer cholera toxin b subunit (CtB) and the anterograde tracer biotinylated dextran amine (BDA) were made into discrete locations in the lateral portion of the MD in two monkeys. As expected and as previously reported (Erickson and Lewis, J. Comp. Neurol., 473:107-127, 2004), projections to the frontal lobe were observed. Interestingly, in one animal, CM250, robust connections with S1, S2 and posterior parietal areas were also observed. Specifically, both CtB-labeled neurons as well as BDA-labeled axons were observed in all of these areas. In contrast, no projections between the MD and these parietal areas were seen in the other animal, CM228.
--

Differential effects of noradrenergic medications clonidine and guanfacine on impulsivity in male rats
--

Marigny Normann (Dr. Peter McLaughlin)
--

Edinboro University

Clonidine and guanfacine are noradrenergic drugs used in Attention Deficit Disorder; therefore their effects on attention are widely studied. Less is known about their effects on impulsivity. The variable consecutive number task with discriminative stimulus can be utilized to measure impulsivity in animals while minimizing the cognitive load required, unlike other impulsivity tasks. Guanfacine is selective for the alpha-2A noradrenergic receptor, while clonidine interacts with the alpha-2A, -2B and -2C receptors. Clonidine reduced impulsivity, but a separate study indicated sedation at similar doses. Guanfacine had no effects. Findings indicate beneficial effects, but also sedation, at sites other than the alpha-2A receptor subtype.
--

Environmental Enrichment's Modulation of Nicotine Reinforcement Enhancement in Rats

Zachary Schramm (Dr. Deanne Buffalari)
--

Westminster University

Tobacco, a commonly used substance, has been linked to serious health risks. Nicotine does not serve as a potent reward; therefore, research has attempted to deconstruct nicotine addiction in regard to the potency of nicotine's reinforcement enhancement, whereby nicotine enhances the reinforcing properties of other stimuli. The present study examines the effect of environmental enrichment on nicotine's reinforcement enhancement property. Rats were trained to press a lever
--

for a mildly reinforcing visual stimulus, and tested for responding after injections of nicotine or saline. It was hypothesized that environmental enrichment would decrease the reinforcement enhancement effect of nicotine. Average responding between rats in the enriched condition and rats in the standard condition demonstrated nicotine has no effect on responding for the visual stimulus. The results of this study were not statistically significant, but followed the same trends seen in recent research in environmental enrichment and nicotine induced reward enhancement.

Detection of Anger, Fear and Happiness through Olfactory Cues

Madeline Frech and Eric Mills (Dr. Sandra Webster)

Westminster University

Previous studies showed detection differences between emotion cues of happiness and fear in sweat. The current study adds anger, a bi-valent emotion with known avoidance or approach components and measured EMG facial reactions. In Phase 1 ten men watched four emotion generating clips (fear, anger, happiness, neutral) while their sweat was collected. Appraisals of emotions generated and facial movements matched each emotion condition. In Phase 2, 49 participants (28 women) participated in randomized emotion detection of the samples collected in Phase 1 through olfaction with facial EMG collection and appraisals trials. Men and women were unable to correctly label the emotion cues for all four emotions through smell. Men appraised a higher level of emotion felt while smelling the gauze of sweat than women. Analysis of participants' EMG activity indicated a longer latency period labeling anger in men. The emotions of fear, happiness, and anger cannot be detected through olfactory cues.

Cognitive

Palumbo Academic Center, Room 2210

Moderator: Dr. Ryan Leonard, Gannon University

Malarky: A Study on Misinformation Detection

Josiah Leach and Kristin Davis (Dr. Luke Rosielle)

Gannon University

Recent evidence indicates that factors completely unrelated to the facts themselves, such as an image of a brain next to the information, may influence a reader's perception of the validity of the information (McCabe 2008). An example lies in the case of Crockett's (2008) experiments on the role of tryptophan in moral decision making. In this study, subjects were presented with two articles: one by Crockett on her research (2014), and the other a blatant misrepresentation of Crockett's research. The false article claimed one should eat foods containing tryptophan, such as a cheese sandwich, before making major decisions (Lawrence, 2008). An image of a brain was included on half of the articles in order to examine the relative contribution of the facts and their context on subjects' interpretation of the presented information. We hypothesized subjects will be more likely to assume that the content of the article is factual if the article contains an image of a brain rather if the same article is presented without the image of the brain.

The Long-Term Effects of Concussion on Memory and Balance

Kieu Nguyen, Tyler Uber, Benjamin Magliocca, Megan Dunlap, Corey Sheard (Dr. Victoria Kazmerski)

Penn State Behrend

Evidence on the consequences of sports-related concussions is accumulating. There is also growing concern that balance and memory may be affected. This study assessed the long-term effects of concussions college students. Participants were asked to complete a questionnaire, two working memory tasks on the computer, and a balance assessment via Nintendo Wii. As expected, those without a history of concussion were compared to those with a history generally did more poorly on the tests. Time since the concussion and balance and performance on the continuous performance task were negatively related. There are major implications for the caution that should be exercised in youths and other sport related concussions, especially due to the under estimated amount of three million occurring yearly.

The Effect of Sucrose on a Pavlovian to Instrumental Transfer Task

Ben Walters (Dr. Deanne Buffalari)

Westminster College

The purpose of this research was to examine the effects of sucrose pre-exposure on a lever pressing task. Eight of sixteen rats were exposed to sucrose prior to conditioning and tested with an operant conditioning task, to measure their rate of lever pressing. It was expected that rats that were pre-exposed to sucrose before conditioning that pairs sucrose with a neutral stimulus, would yield a higher rate of lever pressing to obtain food or sucrose than the control group that has no pre-exposure to sucrose before training, showing a relation to obesity and overeating. Pre-exposure to sucrose may change the neural pathways, and along with reward based cues, creates a stronger attraction to the lever pressing task. Results were analyzed between two groups, pre-exposure and control, with the means of lever presses for the operant conditioning task, and were found to be not significant ($F(1,14)=1.98, p=.182$).

Assessing the Classroom Lecture

Devon Bradford (Dr. Aimee Knupsky)

Allegheny College

Research concerning instructor methods of PowerPoint design for classroom lectures has produced mixed results in effects on student learning. The present study compared common practice design with assertion evidence design and whether an instructor engages in passive or active instructions in their effect on immediate and delayed recall of material. Participants were 27 undergraduate students with from a variety of academic lecture disciplines. After being presented with the appropriate instructions and lecture, participants were administered a recall task. One week after the lecture, they were administered another recall task. Results demonstrated that receiving passive instructions with common practice presentation or receiving active instructions with assertion evidence presentations yielded the highest recall of information. This suggests that an instructor's framing impacts memory consolidation.

The Bias of Gendered Language: The Generic Masculine's Effect on the Cognitive Exclusion of Women in Second Language German Speakers

Laura Hagen (Dr. Aimee Knupsky)

Allegheny College

Are subtle, seemingly arbitrary grammatical structures capable of influencing thought processes and biasing cognition? The present study investigated this question by delving into the quirk of grammatical gender and how it contributes to the bias of the generic masculine in a language with formal grammatical gender (German) and a language without (English). In English, the generic masculine is used when a masculine pronoun such as "he" describes a subject of unknown or undetermined sex. In formally gendered German, the generic masculine has a broader influence because role name nouns (e.g. musician) are inherently gendered ("Musiker" for male musician and "Musikerin" for female musician). Previous research has shown native speakers of both languages to be biased when interpreting the generic masculine; revealing that in comparison to alternative gender-neutral structures, usage of the generic masculine facilitates the cognitive representation of male subjects, thus inhibiting cognitive accessibility to female representation. The present study sought to extend upon past research by investigating a novel question: whether second language German speakers are biased by the generic masculine in their interpretation of role name nouns, and whether this bias functions according to German proficiency. Participants (N=90) were asked to name their favorite exemplars from various role name categories (e.g. musician). Each participant received a survey phrased using either the generic masculine, a gender-neutral alternative, or English. Participants were then asked to complete a survey about their experience with German as a second language. Although results showed participants were not significantly biased by the generic masculine regardless of their proficiency level (low vs. high), a slight data trend in favor of the hypothesis encourages future research using alternative methodology. Investigating how and whether the bias of the generic masculine influences nonnative speakers offers an innovative perspective to consider the principle of linguistic relativity in terms of why and when arbitrary grammatical structures can result in meaningful biases.

Interpersonal/Social

Palumbo Academic Center, Room 2224

Moderator: Ms. Nicole Morine, Gannon University

Role of consistence in suspect characteristics portrayed in courtroom animations

Erin Connel, Emilee DeMay, Matthew Atwood, Drake Thornton, & Gabrielle Wiessmann
(Dr. Ronald Craig & Megha Jois Mugur Nagaraj, MA)

Edinboro University

The impact of computer animation in court is not well understood. Though, the presence of animation has been shown to increase guilty verdicts. While presented as demonstrative of expert opinion, jurors may think what they saw is actually what took place. Individual characteristics of the animation may also impact jurors decisions. This project examines the impact of an animation's portrayal of the race of the suspect. Seven conditions of a mock drive by shooting case were developed where the race stimuli presented in the animation and narrative varied as

did the presence of any animation. Data collected included a determination of verdict, verdict certainty, impact of evidence on decision, and demographic information. The results will be examined to identify any effects of race portrayal in the animation on jurors' decision making process. The results will be discussed in relation to potential effects of individual characteristics of animation used in court.

A Cross-Cultural Study of Humor and the Effect of Relationship Type on the Perception of Sarcasm

Rachel Gibbs (Dr. Sherri Pataki)

Westminster College

Research on humor and sarcasm cross-culturally is limited. The current study examines the effect relationship type has on the view of sarcasm of 180 Americans and Egyptians. Participants viewed a sarcastic conversation with either a close friend or an acquaintance of the same-sex and rated how likable the other person is. There were higher likability ratings for close friends versus acquaintances. Men viewed those who used sarcasm as more likable compared to women. The results show that when sarcasm is used with acquaintances, the deliverer of the joke may not be perceived as warmly. Americans were shown to perceive sarcasm as more likable as well. Future studies should seek to examine age differences in the perception of sarcasm, as the current research shows a higher perceived likability for those using sarcasm with friends who are college-aged students.

Hope Contagion: Can you Catch Hope from Friends?

Joanna Moreno (Dr. Sandra Webster)

Westminster College

The purpose of this study is to examine hope contagion in the context of emotion contagion, perceived similarity, and friendship. A state hope scale was developed to test contagion. It was hypothesized that hope would be transferred more effectively between high-trusting, similar individuals. An impossible task called "The Seven Bridges of Königsberg" was used among 20 dyads of women to determine the amount of hope that transferred from the person with instructions to her partner. They all had five minutes to attempt to complete the task. After the task, the participants completed five scales. The results of this study showed that women who were senders of hope had less hope contagion than the receivers, and friends had less hope contagion than acquaintances. This study is important because hope as a trait has not been studied and the results of this study contribute to broadening the field of emotion contagion.

Perfectionism within Romantic Relationships

Joshua Wentz (Dr. Sherri Pataki)

Westminster College

Research has shown that other-oriented perfectionism and socially prescribed perfectionism lead to anxiety and depression and that leads to lower relationship satisfaction in romantic relationships. This study asked what coping mechanisms can raise relationship satisfaction in perfectionistic relationships. This study also looked to find why perfectionists have lower relationship satisfaction. This study had 80 liberal arts college students who were currently in a

relationship complete three surveys, one on perfectionism between romantic partners, one on how couples cope with conflict in their relationships, and one on relationship satisfaction. Perfectionism had a negative effect on relationship satisfaction but when using adaptive coping mechanisms as a moderator we found that relationship satisfaction was higher than people who were using maladaptive coping mechanisms. Further work on this study could lead to understanding whether perfectionists are more likely to use maladaptive coping mechanisms than non-perfectionists.

Developmental 1

Palumbo Academic Center, Room 2205

Moderator: Dr. John Ranney, Gannon University

Nonverbal Processing Deficits in Children Who Display Proactive and Reactive Aggression

Elizabeth Barnhart (Dr. Mandy Medvin)

Westminster College

This study investigated the processing deficits of proactively and reactively aggressive children in response to ambiguous nonverbal situations. This study tested 225 children using self-report surveys that measure hostile attribution bias, aggression self-efficacy, aggression positivity and social goals. It was hypothesized that reactively aggressive children would show difficulties in processing nonverbal cues, while proactively aggressive children would show difficulties in formulating behavioral responses to nonverbal cues. Results indicated that the hypotheses were not supported. A main effect was found for grade group for hostile attribution bias. Main effects were also found for grade group and aggression type for aggression self-efficacy. For future research, issues of using child versus adolescent and adult populations and methods of assessing nonverbal cues are discussed.

An Exploratory Study: First Year Women's Social Identity Development as Related to Use of Social Networking Sites

Samantha Croteau (Dr. Sandra Webster)

Westminster College

This study looks at emerging adults' social identity development through the use of social networking sites during the first month of college. A pretest survey was emailed out to about 170 first year women, 24 students responded to the pretest, which was taken online. After a month the post-test survey was emailed out to the same 24 women, only 14 responded, and 7 participants then met with the researcher to assess their use of social networking sites. The surveys measured identity development based on the level of exploration or commitment. There was a non-significant interaction between Wave 1 and Wave 2, also, participants can be both exploring and committing to an identity at the same time, but participants are less likely to recommit to something new. The last thing looked at was the use of social networking sites as an aid of development, there was no relationship between the use of social networking sites and social identity.

Situated theory of mind: The importance of situational context when mind reading
Kathryn Denning (Dr. Aimee Knupsky)
Allegheny College
Research on theory of mind (ToM), also known as mind reading, often focuses on how people infer others' mental states through behavior, self-knowledge, or generic information. One key source of information, situational context, has typically been under researched in connection with ToM. Consequently, we assessed how important people found situational context in comparison to nonverbal behavior and social group information. Specifically, we examined whether the importance of situational context in comparison to nonverbal behavior and social group information varied across six different scenarios (Experiment 1), as well as when the context of the scenario remained constant but the target variables of status and gender (Experiment 2) varied. The series of experiments provided converging evidence that people rate situational context as the most important information type, both across six different scenarios (Experiment 1) and when the gender and workplace status of the target varied (Experiment 2).

Sexting Among High School Students: Age, Gender and the Risk of Sharing Photos
Dana Shreve (Dr. Melissa Bell)
Chatham University
As cellphones and social media become a more popular platform for communicating, sexting has become a more common way for individuals to engage with one another. A study of data was undertaken to identify the attitudes of teenagers towards sexting and the risks they face by engaging in it. A statistical analysis was done using secondary survey data from two high schools with participants in grades 9 through 12. Our research shows patterns in sexting habits among high school students of all grades, with participation in sexting having an influence on opinions of forwarding sexual picture texts.

Developmental 2

Palumbo Academic Center, Room 2237

Moderator: Mrs. Barbara Townsend , Gannon University

Perceived Parental Support, Optimistic Explanatory Style, and Coping Strategies
Gretchen Schwarz (Dr. Mandy Medvin)
Westminster College
Studies have shown that students of all ages with higher optimism demonstrate increased social, academic, and emotional success. This study examined how perceptions of parental support influence coping mechanisms indirectly through optimistic explanatory style in middle school students. A total of 64 participants from a public middle school in northeast Ohio ages 12-14 (64% female) used self-reflective surveys to evaluate perceptions of parental support, optimistic attributes for an academic failure, and problem-focused coping versus emotion-focused coping. More optimistic students employed problem-focused coping. Results showed optimistic explanatory style to be a partial mediator between perceived parental support and problem-focused coping. The strength and permanence of parental support is discussed.

The Relationship between Screen Time and Active Play
Amber Starr (Dr. Peggy Stubbs)
Chatham University
Research has found technology has changed the way children play. Today, children are paying more attention to a screen than participating in other kinds of play. The television has become an icon for a “peacekeeper” and neighborhoods are unsafe for children to play outside. This study had parents answer a questionnaire about their youngest child’s, between the age of 2 and 13, typical play activities. The most significant findings were first the relationship between parents’ screen time and children’s screen time. This relationship confirms previous research. Parents should be encouraged to be more aware of screen time usage. Second, it was found that children are participating in a lot of screen time. Searching the Internet was not a common activity participated in by younger boys and girls. There are a lot of other play activities occurring as well. Further information can be found within this paper.

Effect of Setting on Acceptability and Reasoning behind the Exclusion of Children with Disabilities
Jacqueline Tyszkiewicz (Dr. Mandy Medvin)
Westminster College
This study utilized social domain theory to investigate the effect that setting has on the views of exclusion of a child with physical disabilities. Sixty-four children in fourth through sixth grade read three scenarios in which a child with a physical disability was excluded at school, playground, and home. The participants judged the acceptability of exclusion and provided justification for their responses. The results partially supported the hypothesis that acceptability and reasoning of exclusion will vary depending on setting. As predicted, acceptability was lower in the school setting than in playground and home settings. As predicted, the predominant reasoning utilized in school was moral. The playground and home scenarios partially supported the reasoning hypotheses because moral reasoning, as well as societal and psychological reasoning, were utilized most often. Despite the potential limitation of social desirability factors, these findings can be utilized to create intervention programs that encourage inclusion.

Clinical Psychology

Palumbo Academic Center, Room 2207

Moderator: Dr. Lori Lindley, Gannon University

The Effect of Innocuous Factors on Client Ratings of Satisfaction with Psychotherapy
Caitlyn Barry (Dr. Mandy Medvin)
Westminster College
"This study investigated how extraneous factors related to therapeutic alliance and therapeutic environment influenced client satisfaction ratings. Participants were distributed across five conditions; Friendly Experimenter, Rude Experimenter, Control, Organized Environment, and

Disorganized Environment. After watching a short informational program about staying focused on tasks, each participant completed the Client Satisfaction Questionnaire-8 to measure their satisfaction, and a Manipulation Check to assess what influenced their satisfaction rating. It was expected that participants in the Friendly condition would report the highest ratings of satisfaction, followed by participants in the Organized condition and then participants in the Control condition; it was expected that participants in the Disorganized condition would report low ratings of satisfaction, and participants in the Rude Experimenter condition would also report low satisfaction ratings. Results showed partial support for this hypothesis as they indicated experimenter attitude and room cleanliness had some impact on client satisfaction ratings.

Is Social Media Creating a Less Social You?

Julie LeVan (Dr. Victoria Kazmerski)

Penn State Erie, The Behrend College

The creation of social media platforms allow today's generation to expand their technology usage tremendously. With millions of users logging in every day, Facebook is the most popular social media platforms. While Facebook can be used as a positive tool to stay connected with friends and family, the access to social comparison can have a negative impact on a person's life. Along with social comparison, excessive Facebook usage may link to higher levels of social anxiety. In the current study, it was hypothesized that: 1) increased Facebook usage is related to higher levels of impaired social skills and depressive symptoms and 2) increased Facebook usage is related to lower levels of self-esteem. Multiple self-report surveys were administered to college students enrolled at a Northwestern Pennsylvania university. Results from this study could give way to modifications for Facebook usage in order to lessen the negative impacts that accompany the social networking site.

An evaluation of pain tolerance in individuals with or without sub-clinical obsessive-compulsive behavior

Amanda Sobieski (Dr. Deanne Buffalari)

Westminster College

This experiment was designed to examine the relationship between subclinical tendencies toward obsessive compulsive disorder and pain tolerance. Individuals who had behavioral tendencies toward obsessive compulsive disorder were expected to have a greater pain tolerance than individuals without subclinical OCD. A secondary hypothesis was that individuals, when shown disgust images, were expected to have an even higher pain tolerance than when shown neutral images. The design was a 2X2 experimental design. College students (n=44) were first screened using the Obsessive Compulsions Scale, then shown either a neutral or disgust photo array, and then underwent a cold pressor task. The results of the experiment showed that individuals with tendencies toward OCD behaviors did not have significantly higher pain tolerance than those without. Across all conditions, pain tolerance was higher than expected. The secondary hypothesis yielded no significant results, suggesting that targeting specific obsessions through images has no effect on pain tolerance.

How Well Do Students Know Their Accommodation Rights and Responsibilities?
Amber Telfer (Dr. Deborah Gagnon)
Wells College
Many of the greatest thinkers and creators the world has ever produced would have been labeled “learning disabled” (e.g., Einstein, Edison, DaVinci, Picasso). In the United States, legislation such as the Americans with Disabilities Act ensures that qualified students are not denied access to higher education simply because of their difference and that they are supported in their quest for an education through reasonable accommodation. Do entering students know what their rights and responsibilities are? The current research used a survey methodology administered at three college campuses in Central NY: Wells College, Cornell University, and Ithaca College. The results shed light on what students do and do not know about their rights and responsibilities and will be used to help develop a handbook for entering college students that will help them navigate through this system. We can’t afford to let the next Einstein or Picasso fall through the cracks!

Personality

Palumbo Academic Center, Room 2221

Moderator: Dr. Dave Tobin

Why Do People Help: Self-monitoring and Self-Sacrificing
Emily Brune (Dr. Sherri Pataki)
Westminster College
This study examined self-monitoring in 50 undergraduates to explore the relationships among self-monitoring styles, empathy, and self-sacrificing behavior. Participants completed measures of their self-monitoring style, social desirability, and emotional empathy. The predictions were that high self-monitors produced more self-sacrificing behaviors in public than low self-monitors, but not in private. All participants completed an informed consent as well as the packet of surveys and questionnaires. The participants were then randomly assigned into public or private conditions and then asked to complete two behavioral measures to assess their helping behavior. The results show that high self-monitoring individuals help more due to the desire to be liked. Another conclusion is that low self-monitoring individuals have higher empathy scores overall compared to the high self-monitoring participants. These results can be applied to research in the social psychology field to look at the motivations for helping behavior, relationships, and even social anxiety.

Evaluating the Effects of Optimism and Expectations on Pain Tolerance
Christina L. James (Dr. Sherri Pataki)
Westminster College
The current study examined the effects of optimism and social support on pain tolerance; 80 undergraduate students were assigned to either a high or low expectation condition and underwent the cold pressor task. The Life Orientation Test-Revised measured optimism and the McGill Pain Questionnaire-Short Form measured amount of pain experienced. Predictions were

that social support conveying high expectations would lead to greater pain tolerance for participants high in optimism, but lower pain tolerance for participants low in optimism. The interaction between optimism and expectations derived through social support was not significant. Overall, optimism and expectations were predictors of pain tolerance. Implications of this study include that when people have positive expectations they tend to perceive less pain regardless of their level of optimism, and the more optimistic a person is the higher pain tolerance they have regardless of expectations.

Replication of impulsivity and credit card debt among college aged students

Katie Kaminski, Rebecca Haritonovich, Hannah Rea, Michelle Winwood, Jonathon Blazevec, Lauren Murphy, Emma Preston, Jordan Kist (Dr. Matthew T. Weaver and Dr. Jin H. Woon)

Mercyhurst University

Increased financial responsibility and poor decision-making are two hallmarks of college life. The purpose of this replication was to assess the relationship between impulsivity and credit card usage among college students. This replication aims to assess different facets of impulsivity related to personality measures using the Barratt Impulsivity Scale, a delay discounting task, and novel demographic questionnaire. The original study, completed in 2014, showed that students with credit cards are significantly less impulsive than students without credit cards ($F(1,42)$ $p < 0.0001$). Similar results showing lower levels of impulsivity among credit card users were found by this replication. It appears that college aged individuals with credit cards may show lower levels of impulsivity due to long term planning concerning credit scores.

The Relationship among Individuals Anticipation and Pain as it Relates to Personality and Pain Tolerance

Carly Zandier (Dr. Sandra Webster)

Westminster College

The purpose of this research is to examine the relationship of anticipated pain on pain perception and pain tolerance as mediated by extraversion. Fifty undergraduate Westminster College students were randomized into one of three different anticipatory scripts that described either extreme pain, minimal pain, or control for a hand exercise they were told they would undergo. Researchers measured heart rate, galvanic skin response, personality, pain perception and pain tolerance. Pain tolerance decreased in the extreme pain instruction, suggesting that a verbal warning of painful stimulus is not beneficial for practitioners to use with patients. Pain tolerance decreased in more extroverted people when extreme pain was anticipated. This suggests that personality characteristics should be taken into account when practitioners choose pain instructions for their patients. Future research would include actual pain with both subjective and objective measures of pain tolerance and pain perception.

Author Index

Author	Page(s)	Author	Page(s)	Author	Page(s)
Abdalla, R.	4	Hetzel-Riggin, M.	8	Rockwell, J.	4
Armstrong, S.	4	Hildebrand, M.	10	Rogers, D.	4, 6, 8, 12
Atwood, M.	26	Horchar, M.	11	Rosielle, L.	5,15,17,25
Barnhart, E.	28	James, C.	21	Ruby, H.	12
Barron, A.	20	Jamison, B.	11	Rutledge, P.	11
Barry, C.	30	Kaminski, K.	33	Schneider, A.	18
Bell, M.	29	Kazmerski, V.	4, 25, 31	Schramm, Z.	23
Belz, R.	4	Kinney, E.	4	Schwarz, G.	29
Bennet, C.	5	Kist, J.	33	Seng, E.	18
Blazevic, J.	33	Kitchen, K.	12	Sheard, C.	25
Boerger, E.	20	Knafelc, S.	12	Sheffer, A.	19
Bradford, D.	25	Knupsky, A.	14,25,26,29	Shreve, D.	29
Brotzman, K.	5	Kottwitz, H.	12	Simmons, L.	19
Brune, E.	32	Kozuch, T.	12	Skelly, M.	12
Buffalari, D.	23,25,31	Kunkes, T.	8	Smeltzer, A.	15
Butler, S.	6	Leach, J.	24	So, R.	20
Campbell, D.	18	Lee, A.	13	Sobieski, A.	31
Casteel, T.	6	Leopold, A.	13	Soros, K.	20
Ciorra, A.	6	LeVan, J.	31	Spain, E.	20
Clark, R.	9,11,13,14	Magliocca, B.	25	Starr, A.	30
Conklin, S.	10	Mance, A.	13	Stubbs, P.	30
Connel, E.	26	Master, A.	18	Telfer, A.	32
Cottingham, L.	7	McLaughlin, P.	10,23	Thomas, S.	21
Craig, R.	17,26	McMurray, K.	14	Thorton, D.	26
Croteau, S.	28	Medvin, M.	19,28,29,30,	Tyszkiewicz, J.	30
Croxton, J.	20	Mills, E.	24	Uber, T.	25
Dang, V.	7	Mongillo, J.	14	Veglia, M.	21
Davis, K.	24	Mooney-Ryan, M.	15	Walters, B.	25
DeChard, K.	8	Moreno, J.	27	Warner, A.	21
DeMay, E.	26	Mullins, M.	15	Weaver, M.	12,15,33,
Denning, K.	29	Murphy, L.	33	Webster, S.	24,27,28,33
DiCaprio, S.	8	Nagaraj, M.	26	Wellman, R.	22
Dryer, G.	8	Nassan, S.	20	Wentz, J.	27
Dunlap, M.	25	Nguyen, K.	25	Wertzel, J.	12
Dunn, R.	9	Niebauer, C.	5,10,12,17,22	Wiessman, G.	26
Eckstein-Jackson, L.	7, 15, 17,21	Niklaus, A.	15	Winfield, M.	22
Erkson, H.	9	Normann, M.	23	Winwood, M	33
Evans, E.	23	Olczyk, A.	16	Woon, J.	33
Fowler, B.	9	Park, B.	12	Zandier, C.	33
Frech, M.	24	Pataki, S.	21, 27, 32		
Freese, M.	10	Paulson, L.	6, 13, 16, 18, 19, 20, 21		
Gage, A.	18	Pegher, K.	8		
Gagnon, D.	9, 32	Pellicano, E.	16		
Gibbs, R.	27	Pleso, M.	17		
Hagen, L.	26	Preston, E.	33		
Hamilton, S.	13, 22	Quinn, K.	20		
Hardy, R.	10	Randall, J.	17		
Haritonovich, R.	33	Ray, J.	17		
Hartnett, J.	5	Rea, H.	33		
Heerboth, M.	23	Richman, S.	6,8,9		
Herring, D.	18	Roach, A.	17		