Symposium for Undergraduate Psychology Engagement & Research*

Thursday, April 28, 2016
Phillips Board Room / Paul Adam Lounge
Adams Alumni Center

* To recognize and honor undergraduate research and community engagement during the 2015-2016 academic year.
University of Kansas
Department of Psychology

Symposium for Undergraduate Psychology
Engagement & Research

2016

Awards to be presented at the Psychology Recognition Ceremony

Best Honors Thesis Project
Best Independent Study Project
Best Class Project
Best Use of Quantitative Methods
**CATEGORY: HONORS THESIS**

(1) **Subjective Informant Reports on Cognitive Decline in Older Adult Multiple Sclerosis Patients**
Shelby Rowley  
*(Dr. Michael Vitevitch)*  
Honors Thesis

In order to identify cognitive dysfunction and decline, healthcare providers typically rely on patient self-reports about their memory ability and performance. Recent research has found that relying on these subjective memory reports is problematic since they are influenced by a number of underlying symptoms, such as depression and fatigue, which are both commonly experienced in people with multiple sclerosis (MS). In this study, an Informant Questionnaire on Cognitive Decline in the Elderly (IQCODE) was given to a close friend or family member who has known the older adult with MS for 10 years or more. Preliminary results indicated that unlike self-reports, the IQCODE was not affected by the patient’s mood, but it was significantly related to objective measures of memory performance. Furthermore, the IQCODE was more successful at predicting performance on memory tasks than demographic, clinical, or self-reported mood measures. These preliminary results support the hypothesis that an informant’s report is more representative of an older adult MS patient’s memory functioning than their own self-reports. Thus, the IQCODE may prove to be a useful and more reliable tool for physicians, rather than relying on the patient to accurately assess their own cognitive functioning.

(2) **Effects of Moderate and High Intensity Exercise on Positive and Negative Affect**
Cassidy Nelson  
*(Dr. Stephen Ilardi)*  
Honors Thesis

The goal of this study is to look at positive and negative affect before and after a 3-week treatment of moderate intensity exercise (MICE protocol) or high intensity exercise (HIT protocol) in participants with BDI (Beck Depression Inventory) scores that indicate the participant is experiencing depression. Utilizing the PANAS (Positive Affect Negative Affect Survey), the difference in affect scores between groups can be examined. Participants are randomly assigned to the MICE or HIT protocol. Once assigned, participants are given the PANAS and are then trained on how to execute their exercise protocol. Participants do their protocol for 3 weeks and fill out daily surveys to track adherence to their protocol. Participants return on the final day to retake the PANAS. It was hypothesized that participants in the HIT protocol would experience a more dramatic improvement in positive and negative affect than the MICE participants. However, using a one-way T-test, preliminary data indicates a trend in which both groups feel more negative after their 3-week protocols are finished. On average, participants in the HIT protocol feel 3 points more negative than when they began, while people in the MICE protocol feel .4444 points more negative. It appears that the more intense exercise makes participants feel worse than the less intense exercise. In addition, there is no trend in the preliminary data to suggest that with more power a significant difference in positive affect would be seen, meaning HIT participants do not feel significantly more positive than MICE participants.

(3) **A Study of Medical Decision Making: Not all Moral Dilemmas are Created Equally**
Erin Calhoun  
*(Dr. Christopher Ramey)*  
Honors Thesis

Philosophical investigations and psychological studies of moral decision-making historically have centered on abstract dilemmas (i.e., trolley problems; killing one to save five) that involve very unlikely life or death scenarios. Unfortunately, evaluations of these abstract dilemmas may not capture the processes that underlie the dilemmas human beings actually face on an everyday basis (e.g., scenarios involving stealing money or romantic infidelity). Interestingly, medical
professionals operate between these categories. For example, they must daily evaluate the complex relationship between their own moral considerations, their patients and families, and legal guidelines in making complicated ethical decisions with severe consequences. To investigate moral evaluation in this context, we created a set of stimuli that are representatively everyday of medical professionals and maintain the life or death severity of abstract scenarios. These medical ethical dilemmas were created based on examples from the Cambridge Handbook of Bioethics and cover a full range of issues in medicine. We measured relations between one’s level of empathy and how one evaluates these medical dilemmas. We also investigated the effect of when the event occurred (i.e., already happened, in the past or has not yet occurred, in the future). Research using these stimuli can shed light on aspects of medical training and have implications for subsequent medical practice.

(4) Locating Factors of Eating Pathology Among Internalizing and Externalizing Behaviors
Kendra Weinstein
(Dr. Kelsie Forbush)
Honors Thesis

The aim of this study is to better understand where specific components or symptoms of eating pathology fall under internalizing and externalizing behaviors and how gender affects internalizing and externalizing behaviors. Participants (N = 157) come from an existing longitudinal dataset of adults with eating disorders recruited from the community. Based on previous literature, I hypothesize that all eating disorder symptoms will load on internalizing and all alcohol and drug abuse symptoms will load on externalizing. I also hypothesize that male gender will be associated with increased externalizing behaviors while female gender will be associated with increased internalizing behaviors.

(5) Alcohol, Anxiety, & Hispanic Males: Patterns of Student Drinking at the University of Kansas
Ian Scott Turnbow
(Dr. Tamara Baker)
Honors Thesis

There is an increasing incidence of alcohol consumption on college campuses that has led to both long- and short-term detrimental mental and physical health outcomes. While this is apparent among majority populations, much less is known about this issue among students from diverse race populations attending predominantly White institutions (PWI). To fully understand the impact of alcohol consumption among minority students, this study aimed to determine the amount and impact of alcohol consumption, and related mental and physical health outcomes and social well-being, among Hispanic males (18-25 years of age) enrolled at the University of Kansas. Participants were recruited via correspondence with the Office of Multicultural Affairs (OMA) and the Hispanic American Leadership Organization (HALO). Respondents were surveyed (via Qualtrics) on quantity of alcohol consumed, frequency of alcohol consumption, mental and physical well-being, and social support. Although fewer than 10 students completed the survey, the results offer a glimpse into ongoing issues within the Hispanic-American community, and the glaring issues in conducting research among minority populations attending PWIs. This is indicative of the lack of Hispanic males attending the University of Kansas, as well as the lack of willingness by the sample to participate in a study involving mental and physical health outcomes and alcohol consumption.

(6) Racial Prejudice in Age Perception
Nadia Vossoughi
(Dr. Christian Crandall)
Honors Thesis

Black boys are seen as older, more mature, and more responsible for their actions (compared to White boys). Previous work has attributed these effects as being a result of dehumanization. An alternative hypothesis is that these effects are a way to express prejudice in accordance with the
Justification-Suppression Model. If the dehumanization perspective is supported, participants should perceive Black girls as objectively older than White girls and thus not capable of possessing innocence (dehumanized). If age perception is simply a way to express prejudice, participants should perceive Black girls as looking old for their age (subjective age) as a way to justify negative consequences for the Black girl. The current study tests this hypothesis through an experimental design that presents participants with either a Black or White girl in a situation where being perceived as older has negative consequences (such as in a statutory rape case) and then measures the dependent variables of age (objective and subjective), responsibility, and harm to the girl. Contrary to the dehumanization hypothesis, participants high in prejudice perceived Black girls as being objectively younger (in years and months) than White girls, but were seen as looking older for their age (subjective age). For people high in prejudice, White girls were seen as objectively older (in years and months) than Black girls, but were seen as looking younger for their age (subjective age). This study tests a new hypothesis to demonstrate the real world implications that negative perceptions of Blacks have on Black adolescent girls.

(7) The Effects of Visuomotor Engagement on Semantic Retrieval for Flexible Object Use
Hannah Morrow
(Dr. Evangelia G. Chrysikou)
Honors Thesis

Cognitive neuroscience research on the organization of semantic memory for objects has revealed that different object attributes (e.g., color vs. function), different stimuli (e.g. visual or verbal), and different tasks (e.g., naming vs. object use) can influence the retrieval of semantic information about objects. For example, past work in healthy adults and patients with semantic dementia has shown that certain aspects of object knowledge (e.g., the object’s function or mode of manipulation) can be accessed independently of more abstract properties of the object (e.g., its name) and faster when participants are presented with three-dimensional objects relative to stimuli in pictorial format. However, the majority of these studies have focused on the retrieval of canonical object attributes. Nevertheless, frequently in daily life, one is required to solve a problem or satisfy a goal under unexpected or emergency circumstances, when an object may have to be used in a manner different from its typical use. Here we examined whether visual and manual experience with three-dimensional objects, relative to two-dimensional pictures of these objects, would allow for differential access to semantic memory under conditions of impromptu goal achievement (i.e., when a participant has to come up with an unusual, relative to a typical, use for a common object). Our results showed that participants who engaged with three-dimensional object stimuli during the flexible object use task showed facilitated access to sensorimotor object properties, yielding a reduction in reaction times on this task. We discuss these implications of these results for theories of object knowledge retrieval.

(8) Examining the Impact of Mood on Executive Function Using a Novel Measure of Emotion Regulation Flexibility
Alexandra Fowler
(Dr. Evangelia G. Chrysikou)
Honors Thesis

The ability to regulate one’s emotional responses to different situations (emotion regulation, ER) has been at the center of much cognitive and affective neuroscience research on frontal lobe function, due to the potential significance of different ER strategies for the treatment of different psychopathological disorders. Although past research has largely focused on the neural correlates and efficacy of such regulatory strategies (e.g., expressive suppression, cognitive reappraisal), recent findings have shown that executive function may also involve ER flexibility,
namely, the ability to implement ER strategies that match particular contextual demands. Despite extensive research on cognitive flexibility (i.e., the regulation of cognitive strategies depending on context) much less work has examined ER flexibility. The aim of this study was to develop a novel measure of ER flexibility based on the widely accepted measure of cognitive flexibility, the Wisconsin Card Sorting Task (cWCST). We examined the strength of this new emotion regulation measure (eWCST) to capture ER flexibility in healthy adults and depressed individuals who are characterized by cognitive and ER flexibility impairments. Behavioral and psychophysiological (facial electromyography) data showed that individuals with depression were less flexible on emotional sorting in the eWCST relative to healthy controls, results that mirrored their performance on the cWCST. These findings contribute to the developing literature on ER flexibility, while allowing for novel comparisons between cognitive and emotion regulation domains.

(9) The Utility of Attachment Priming as an Intervention Among Youth with Traumatic Experiences
Austen McGuire
(Dr. Omri Gillath & Dr. Yo Jackson)
Honors Thesis

Youth in the United States are frequently exposed to potentially traumatic events. Research has consistently shown a relationship between experiences of trauma in childhood and negative consequences, including various internalizing and externalizing mental health problems. Without proper intervention, these negative consequences can have lasting effects. To help youth cope with the potential negative consequences of traumatic experiences, researchers have developed various interventions, but most of these interventions are not theoretically based. Attachment is a well-studied theory focusing on close relationships and affect regulation. Attachment-based interventions (ABIs) have shown potential to successfully improve youth’s well-being and decrease their trauma related symptomatology through increasing attachment security. However, current ABIs tend to be time consuming, have high costs, and require a professional and infrastructure to be carried out. The current study tested the efficiency of repeated attachment security priming, a potential low cost, easy to administer, attachment based intervention to reduce symptomatology among youth with traumatic experiences. Seventy-six non-clinical adolescents were repeatedly exposed to either attachment security or neutral primes over the course of two weeks. It was hypothesized that attachment security primes as compared with neutral primes would result in increased attachment security and decreased levels of depression, anxiety, and interpersonal sensitivity from pre- to post-assessment. Although not all outcomes were significant, trends were observed in the direction hypothesized, suggesting that repeated attachment priming may be a useful intervention among more clinical samples of youth with experiences of trauma.

(10) Mother or Spouse? Filial Piety, Romance, and the Meaning of Love
Dongyu Li
(Dr. Glenn Adams)
Honors Thesis

Mainstream research portrays prioritization of love/care in mating versus kin relations as a standard of adult functioning. A cultural psychology perspective proposes that this “standard” pattern is not a context-general law, but instead reflects ecologies of relational mobility (RMob) that afford opportunities to form new (and terminate old) connections. To investigate, we conducted studies in the U.S (Study 1 & 2) and China (Study 3) in which we measured RMob, filial piety (FP), and responses to an imaginary dilemma that forced participants to prioritize care between spouse and mother. In Study 1, RMob correlated negatively with the authoritarianism component of FP, positively with the affection component of FP, and both components of FP predicted negative priority
of spouse over mother. In Study 2, the authoritarianism component of FP mediated the relationship between the voluntary component of RMob and priority of spouse over mother. In Study 3, the affection component and the authoritarianism component of FP mediate the association of country difference with personal belief about mother priority.

(11) Predictors of dissertation publication in clinical and counseling psychology: Student, advisor, and training program characteristics
Robyn Herbert
(Dr. Michael Roberts)
Honors Thesis

As a Ph.D. is the culmination of a psychology-based education, it represents a student’s original work in the field, meaning it fits criteria for publication. The author explores factors at the student, advisor and program level that predict dissertation publication. It was predicted that higher research productivity for both the advisor and the student and a more research based training program would all result in higher dissertation publication rates. The data supported only one of those hypothesis: the more productive in research an advisor is, the more likely a student is to publish their dissertation, post-defense. There are many reasons why this may be the case: an advisor that is pre-tenure may be pushing students to be more research productive or a research productive advisor may inherently attract students more likely to engage in research. This research has implications for students, in picking their faculty mentor before graduate school, and for training programs, in selecting and critiquing faculty.

(12) Are We Our Brains? The Effects of Scientific Mitigating Circumstances in Differential Responsibility Assessments of Crime
Jeffery Durbin
(Dr. Christopher Ramey)
Honors Thesis

In recent decades, the field of neuroscience has proliferated to study the human brain in an attempt to fully and more tangibly describe human behavior, ostensibly shifting the focus toward biological mechanisms as opposed to psychological processes. This so-called “neurocentric” position forces us to consider how responsibility assessments for individuals’ actions and more specifically, crime, change when explained by neurobiological processes or psychological phenomena. The present study addresses this issue by comparing how individuals change their assessment of a person’s responsibility for criminal behavior when mitigating circumstances are presented in defense of the individual as either (1) a brain-related issue such as a chemical imbalance in the brain or a deformity, or (2) a psychological issue such as inadequate sleep or a lack of focus. The crime scenarios range from petty and non-violent to more severe and unusual. The study hypothesizes that the neurobiological mitigating circumstances will result in a greater reduction in responsibility assessment than the psychological mitigating circumstances. As data collection is ongoing, results of the study will be used to examine scientific and legal implications, such as the role of neuroscience and psychology in establishing mens rea—literally “a guilty mind”—when prosecuting and convicting criminals.

(13) Compensating for the threat of sexual assault: Blaming the system not the victim
Sara Ventura
(Dr. Ludwin Molina)
Honors Thesis

The role of social groups is important in terms of an individual’s sense of personal control. Individuals that highly identify with a valued social group derive high levels of perceived personal control through their group membership (Greenaway et al., 2015). When a valued social group is threatened, group members often experience a loss of perceived personal control (Goode, Keefer, Branscombe, & Molina, 2015). At the same time that the group may be the source of a threat to control, research has shown that individual group members may compensate for this threat by increasing their identification with the group, and relying upon their group's normative beliefs about
the social structure. The current study \((N = 68)\) furthers prior work by investigating how college-aged women react to threats to personal control contingent upon the individual self vs. their social group. We expected that a threat to personal control based off of the social group (increased sexual assault on campus) in comparison to a threat based off the individual (increased theft on campus) would increase women’s identification with their group, beliefs that the roots of sexual assaults are systematic (rather than personal), and willingness to engage in social action related to sexual assault. This study provides important insight to how group members compensate for a loss of personal control due to threats to their group.

(14) Racially and Ethnically Minoritized Groups and Their Perception of Mental Illness
Cornelius Baker
(\textit{Dr. Michael Vitevitch})
Honors Thesis

This study examines how racial/ethnic identities of African American and Hispanic/Latino people influence perception of mental illness. Previous studies have shown that the etiology of depression heavily involves the presence of stress which may lead to the development of depressive symptoms. When considering the stress one may experience as a result of racial discrimination or prejudice it could be hypothesized that people in these racially minoritized groups are more susceptible to depression. However the literature has shown that individuals in some of these groups have reported a lack of necessity for mental health care. One possible explanation for why these groups are not seeking professional help may stem from the stigma surrounding mental health in these communities. In the present study participants that self-reported as White, African American/Black, or Hispanic/Latino were recruited. Participants were asked to imagine themselves as the person being described in a series of vignettes relating to a physical illness (i.e. bronchitis) and a mental illness (i.e. clinical depression). Participants then answered a series of questionnaires assessing their perception of the diagnosis. Once the data is collected the language provided by participants in their justification for diagnoses will be analyzed for markers or themes that may be specific to each racial/ethnic group. This knowledge will hopefully aid in the ability to effectively understand the perception of mental health in marginalized racial and ethnic communities.

(15) Cross-cultural study: Social Factors that influence Mental Health Help-seeking Behavior
Nanyi Deng
(\textit{Dr. Monica Biernat})
Honors Thesis

This study examines four social factors (culture, stigma, social support, and familiarity to mental health) that influence mental health help-seeking behavior by comparing Asian International and domestic students. The study is conducted through self-report survey with utilization of various existing scales. Participants include approximately 200 Asian international students and 300 U.S. students. Compared with domestic students, we expect that Asian international students have lower social support, higher stigma and lower familiarity toward mental health, and have lower rate of mental health help-seeking behavior in general. We believe that social support and familiarity will be two most important social factors that predict mental health help-seeking behavior.

(16) Distracted Driving Habits Among Self-Reported ADHD Groups
Austin Svancara
(\textit{Dr. Ruth Ann Atchley})
Honors Thesis

Text messaging and talking on a cellular phone have been identified as major sources for distraction when driving leading to vehicular crashes. Laws restricting text messaging while driving tend to have little to no long-term effects on text messaging behaviors, particularly among younger drivers (McCartt and Geary, 2004; Foss et al., 2009; Vlingo Corporation, 2010). Young adults are more at risk of experiencing car crashes. Additionally, researchers observed higher rates of
vehicular crashes among individuals with Attention Deficit-Hyperactivity Disorder (ADHD) than those without ADHD. It is not yet fully known why this occurs. The purpose of this study is to explore this connection. To do so, adults aged 18-25 were be recruited through Amazon Mechanical Turk (MTurk) and from introductory psychology courses. Participants completed a battery of surveys that included measures of impulsivity, boredom proneness, ADHD symptomatology, and text messaging behaviors. Impulsivity, proneness to boredom, and ADHD symptomatology are predicted to have a strong influence on the frequency of text messaging while driving. Preliminary data analysis seems to suggest, paradoxically, that lower levels of impulsivity is related to elevated levels of text messaging behaviors. A structural equation model (SEM) will be used to further examine the relations of these variables. Data are still being collected at this time. These data will not only provide insight into why people text message while they drive but may help to clarify why some populations with higher levels of impulsivity (e.g., some individuals with ADHD), have more car crashes than the average driver.

(17) Implicit Perceptions of Police Brutality as Moderated by Race
Adrian Rivera-Rodriguez
(Dr. Monica Biernat)
Honors Thesis

A significant body of previous research has investigated the effects of exposure to police brutality on individuals’ explicit perceptions of police. Although these studies suggest that racial differences exist between White and Black perceptions of police brutality (i.e. excessive use of force, and verbal abuse), the reasons for these differences are not yet clear. It is possible that reliance on self-report measures, as well as focusing mostly on police brutality involving Black victims, is limiting our understanding of this relatively controversial subject. Consequently, the current study aims at expanding previous published studies by investigating the effect of exposure to police brutality on implicit perceptions of police, and whether this effect was moderated by the race of the victim and/or the race of the witness. Our findings suggest that individuals’ implicit perceptions of police become more negative only after exposure to instances of police brutality involving a victim of their same race. These findings, and their potential implications are discussed in some detail.

(18) An Investigation of Bias in Translation: Differences in Communication and Interpretation
Ashley Bennett
(Dr. Monica Biernat)
Honors Thesis

Communication of personal impressions can be influenced by group stereotypes. Collins & Biernat (2008) assigned participants to either a communicator role, responsible for writing a personal impression of a student from their college transcript, or an interpreter role, responsible for back-translating the student’s GPA from the communicator’s impression. Ultimately, communicators gave a more positive impression of Black students then White students, despite reviewing identical transcripts. During the back-translation task, the interpreters estimated a lower GPA for Black students then White students, despite the impressions favoring Black students. Findings of Collins & Biernat (2008) suggest a shift in standards in the communication about academics of Black and White students. This study aims to investigate whether the effect is similar when evaluating employee performance within a software development firm. Information and technology occupations are male-dominated in population and social stigma. Here, half the participants will be randomly assigned to the communicator role and are responsible for writing a personal impression from the provided employee performance report, similar to the real-world responsibilities of a human resources employee. All other participants will be randomly assigned to the
interpreter role and are responsible for awarding employees their annual raise from the communicator’s impression, similar to the real-world responsibilities of a general manager. We hypothesize that the communicator’s impression will favor the female employees over the male employees, despite identical performance reports. However, we also hypothesize that the interpreters will ultimately award a higher annual raise to the male employee, despite the predicted female favoring communicator impressions. An IAT will be used to measure participant’s implicit attitudes toward women, which will be investigated as a potential moderator of this effect. Communication of personal impressions about employee performance is common among employers when deciding annual raises giving this study practical significance.

(19) Using network science to provide a proof-of-concept for treatment of aphasia
Alison Summers
(Dr. Michael Vitevitch)
Honors Thesis

Network Science uses tools from mathematics, sociology, and computer science to study how separate entities (such as words stored in memory) in a web-like structure are related. In the present study I examined how similar sounding words stored in the mental lexicon influence an individual’s ability to recognize words in English. In the pre-test phase, participants decided if the stimulus they heard was a real word in English or a made up nonword. In the training phase participants matched pictures and words (giving them exposure to different words that were phonologically related to the pre- and post-test words). Finally, in the post-test participants again decided if the stimulus they heard was a real word in English or a made up nonword. Despite not being directly trained on those items, words in the post-test were responded to more quickly and accurately than the same words in the pretest. These results suggest that training phonologically related words may not only benefit performance on the trained items, but also benefit performance on similar sounding items, providing a proof-of-concept for a potential treatment in patients with aphasia that would speed recovery.

(20) A Qualitative Analysis of Experiences Surrounding Accessible Parking
Peyton Peaches
(Dr. Glen W. White and Kelsey Shinnick M.A.)
Honors Thesis: Dr. Michael Vitevitch

The Americans with Disabilities Act (ADA) of 2010 requires that one of every six accessible parking spaces be designated as van-accessible. This law was enacted to ensure that drivers of ramp or lift equipped vans (RLEVs) have an ample opportunity to find available parking spaces that accommodate their parking needs. However, because people often park over or on top of the access aisle adjacent to these spaces, RLEV drivers still experience parking difficulties on a regular basis. The purpose of the current study was to learn about the parking experiences of people with disabilities who frequently use the access aisles adjacent to accessible parking spaces. A focus group was conducted with individuals with disabilities who had experience using the access aisle adjacent to accessible parking spaces. An analysis of focus group data revealed several themes, including: (1) lack of usable van-accessible parking spaces, (2) frequently referenced objects that block the access aisle or parking spaces, (3) unique parking strategies, (4) reasons for access aisle parking violations, (5) insufficient marking and labeling of access aisles, and (6) ways to decrease access aisle violations. The research team intends to use the findings of the current study to help influence policy change and increase independence and ease of community access within the disabled community.
(21) Developing a Self-Management Program: Why are Black Men at Risk of Chronic Illness?
Laura Nordhem, Riley Hess, Nicole Kramer, Darlingtina Atakere, Paige Whiteside, Skylar Johnson, Destiny Coleman, Lamont McCray-King (Dr. Tamara Baker)
Independent Study

There is a large disparity between the life expectancy, health, and quality of health care between African American men and men of other races. African American men have shown to have higher rates of heart disease, cancer, and a number of other chronic illnesses. The fact that this vulnerable population has a lower life expectancy than other racial groups and are, more prone to developing chronic illnesses that are more severe and at a younger age, raises many concerns about the best ways in which they should manage their health care. This study gathered information about demographic characteristics, health perceptions, medical history, active coping, depressive symptomatology, and ways of delivering a disease self-management programs (CDSMP) from a group of African American men 21+ years of age. The data showed that hypertension, diabetes, and chronic pain as the most reported medical conditions. Overall, most participants stated that they believe there is a need for CDSMPs designed specifically for African American men. Furthermore, many reported that they prefer to participate in CDSMPs that are delivered by someone of the same race. Perhaps the results of this study could lead to the development of such programs that are specifically aimed at African American men and eventually close the gap between their health and the health of other populations.

(22) Easy Come Easy Go: Understanding Hard-to-Get Using Attachment and Mating Strategies
Kimberly Francis, Gita Nadinda, Jeffrey Bowen (Dr. Omri Gillath)
Independent Study

Playing hard-to-get is often portrayed as a prominent dating behavior. Across two studies, we examined the association between attachment style, playing hard-to-get and pursuing hard-to-get others. College student’s attachment style was first assessed by the Experiences In Close Relationships questionnaire. Then, participants rated their tendency to either play hard-to-get or pursue hard-to-get mates. The results from Study 1 showed that highly avoidant individuals were more likely to play hard-to-get. The results from Study 2 showed that highly anxious individuals were more likely to pursue hard-to-get others. The results help us to understand how modern dating behavior can be affected by individual differences like attachment style.

(23) The Effect of American Responsibility for Global Warming on Willingness to Act
Elizabeth Waldberg (Dr. Rachel McDonald)
Independent Study

This study investigates the effect of perceived ingroup responsibility for global warming on a person’s willingness to take pro-environmental actions. There were 95 participants sampled from a PSYC 104 course at the University of Kansas, who were divided into two conditions. In the high responsibility condition, students read an article about climate change that highlighted heightened greenhouse gas emissions by the United States in comparison to other countries, while a control group read an article that did not compare the United States’ emissions with those of other countries. T-tests revealed a marginally significant
main effect of responsibility on willingness to engage in pro-environmental behavior $t(95)=-1.85$, $p=.068$, and a marginally significant main effect of responsibility on collective guilt $t(95)=1.89$, $p=.063$. Additionally, a mediation analysis showed a significant indirect effect of responsibility on behavioral willingness via collective guilt (Effect=.25, SE=.14, LLCI=.0034, ULCI=.5694). Similar research conducted on this topic also concludes “collective guilt for an ingroup's collective greenhouse gas emissions mediates the effects of beliefs about the causes and effects of global warming on willingness to engage in mitigation behavior.” (Ferguson and Branscombe, 2010).

(24) Stress Response to Security and Insecurity Primes, as a Function of Attachment Style and Priming Order
Alexis Mills, Elizabeth Tampke (Dr. Omri Gillath)
Independent Study

According to attachment theory, when facing stress or threat, people’s attachment system is activated and they seek their security providing caregivers for support and comfort. In this example attachment security serves to recover from the stressful situation (recovery function). In laboratory studies, researchers often provide security boost ahead of time using priming and then examine people’s reaction to stressors, assuming security will serve as a buffer (buffering function). Here we compared the recovery and buffering functions, by examining how prime order presentation (before or after stressor presentation) and attachment style influence people’s reaction to the stressor and recover following. Participants completed one negative and one positive interviews in the laboratory concerning their past relationships. The positive interview served as a security prime, whereas the negative one served as a stressor (increasing attachment insecurity). Participants stress levels were measured using changes in cortisol levels, skin-conductance, and heart rate. Results supported both functions, but showed a slight advantage to the buffering function. Thus, people who were buffered with security, had a lower overall stress response. Anxiously attached people had overall the slowest recovery. These findings suggest that both order and attachment style affect stress response. Further, they suggest that having a security buffer (prevention) might be more efficient than security help on recovery (intervention).

CATEGORY: CLASS PROJECT

(25) The Effects of Facial Expression Regulation on Physiological Responses
Yee Ming Khaw, Emily Yoder, Cory Sessum, Amanda Gerber
Class Project PSYC 625; Dr. Evangelia Chrysikou

According to the James-Lange model of emotional processing, a stimulus leads to bodily arousal, which then leads to the experience of certain emotions. In line with this theory, the current study aimed to investigate whether physiological reaction can be regulated by the conscious control of facial expressions. We hypothesized that exaggerated facial expressions would be associated with elevated measures of sympathetic activation as captured by participants’ Electrodermal Activity (EDA) and Heart Rate (HR) responses, a relationship that has been supported in previous studies using different paradigms. In the study, twenty participants were shown positive, negative, and neutral images while their physiological responses were recorded. Respondents were to either (a) suppress their emotions, (b) exaggerate their emotions, or (c) react naturally. We found significantly lower physiological responses in the suppression condition and greater physiological responses in the exaggeration condition. However, the measures of physiological responses were not significantly different among manipulation conditions specific to each type of visual stimuli. This pattern of results warrants further rigorous investigations to understand how the control of facial expression may confer benefits for mood regulation. Future research will determine the long-term implications of the paradigm for behavioral therapy purposes.
(26) The Effects of Exposure to Police Brutality on Physiological Arousal as Mediated by Race
Adrian Rivera-Rodriguez, Garrett Mehl, Robinson Mikolowski, Bobby Engen
Class Project PSYC 625; Dr. Evangelia Chrysikou

Previous studies have shown that even though the majority of Americans oppose excessive use of force by police, significantly more African-Americans believe police brutality is an issue in the U.S. compared to Caucasian-Americans. This difference in opinion is still not completely understood, perhaps because past studies rely on self-report measures and focus primarily on police brutality involving African-American victims. The current study aimed at investigating whether differences exist between African-Americans’ and Caucasian-Americans’ physiological arousal in response to viewing videos of police brutality, and whether the race of the victim in the videos influences this response. Our findings suggest that Caucasian-Americans may be more easily aroused by videos of police brutality and are more likely to show higher levels of arousal when the victim in the video is white. Potential implications of these findings for the underlying mechanisms that influence explicit perceptions of police brutality as an issue in the U.S. are discussed.

(27) Psychophysiological Measures of Cognitive Dissonance: Attitudes Towards Lesbians and Gay Men
Lucy He, Val Kutchko, Shelby Rowley, Aidan Stubbs
Class Project PSYC 625; Dr. Evangelia Chrysikou

Over the last 20 years, there have been rapid changes in public acceptance of lesbians and gay men in the United States. However, recent studies have shown that individuals’ conscious explicit dispositions are not necessarily an accurate depiction of their unconscious implicit attitudes toward these groups. This inconsistency in explicit and implicit attitudes is referred to as cognitive dissonance. In this study, skin conductance response (SCR) was measured while participants completed implicit and explicit tests related to information on lesbians and gay men to examine the hypothesis that people who experience cognitive dissonance would have higher physiological responses than people with consistent implicit and explicit attitudes toward these groups. Across participants, SCR was found to be higher during the explicit attitude questionnaire versus the implicit test. Although not significant, there was some evidence suggesting a higher SCR in participants experiencing cognitive dissonance, compared to participants who had consistent explicit and implicit attitude scores toward these groups.

(28) How is music relaxing?
Eugenia Hernandez-Ruiz, Bianca James, Jordan Noll
Class Project PSYC 625; Dr. Evangelia Chrysikou

This study examined the relaxing effects of music according to three physiological measures — heart rate (HR), respiration rate (RR), and skin conductance level (SCL). Female undergraduate students (N = 20) listened to 4 versions of originally composed music, each with one modified musical element (tempo, timbre, or dynamic). Physiological differences between music and baseline, and in relation to self-reported levels of relaxation, were examined. We predicted that participants’ physiological responses would reflect a more ‘relaxed’ state (lower HR, less SCL, and lower RR) with slower tempo (45 bpm), mellow timbre (clarinet), and lower dynamics (piano). We also expected physiological responses to be consistent with self-reported relaxation measures. The results showed two distinct responder profiles for skin conductance level, which required post hoc between-subjects analyses of the data. Using 2 × 4 ANOVAs, we found significant differences between subjects in SCL, but not within subjects, probably due to small sample size. Some correlations between physiological measures and self-reports were found. Participants’ comments indicated lack of awareness of music variations. This finding coupled with different responder profiles raise interesting questions regarding the effect of music on relaxation without conscious perception, and its impact on music-based therapeutic interventions.
(29) The Effects of Perceptual Features of Spiders on Fear Responses
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How and why we fear certain stimuli has been a topic of major interest in the literature on emotion. Studies have found that we learn to fear evolutionarily recurrent threatening stimuli more rapidly than other stimuli. To determine how we quickly identify these stimuli as threatening, research has been conducted on low-level perceptual features, such as the “V” shape of eyebrows on angry faces or curvilinear shapes of snakes’ bodies. Previous findings suggest that shape is, indeed, a factor in how we quickly determine a stimulus to be threatening. Our study investigated if shape was also a key feature for fear of spiders, using measures of heart rate and skin conductance. We found that spiders always elicited higher heart rates compared to flower stimuli, but only spider legs elicited both increased heart rates and skin conductance. This implies that spider legs are the key characteristic for detecting spiders as threatening stimuli.

Facial electromyography (EMG) data were then collected from the zygomatic and corrugator muscles as participants completed the Reading the Mind in the Eyes task. The results indicated that valenced autobiographical priming had no effect on behavioral empathy task performance. The positively primed group exhibited significantly greater zygomatic activation for positive and neutral stimuli compared to the neutrally primed group. These results suggest that positive priming may enhance empathic ability to non-negative stimuli through positive perceptual bias. We conclude that valenced autobiographical priming may increase empathic ability on the perception of valenced stimuli.

(30) Priming Effects of Valenced Autobiographical Memories on Empathy
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Empathy is essential to emotional communication as it allows us to cognitively recognize and affectively respond to emotional signals. Priming through valenced stimuli and priming through ruminative autobiographical prompts have both been shown to influence empathic abilities. However, prior studies have not combined these two techniques. Thus, the aim of the present study was to investigate a potential dissociation between positively- and negatively-valenced autobiographical memories on empathic abilities. Participants (N = 21) were randomly assigned to one of three priming conditions, where they were instructed to reflect on either a positive, or a neutral, or a negative autobiographical memory.

This study investigated the effects of video games on attentional skills for participants with video game expertise and non-experts. Participants were administered three attention tasks (Stroop, trail making, and hidden object) before and following a 25-minute gaming intervention. During each of the attention tasks, electrooculography (EOG) was used to record eye movements. The number of saccades present in the Stroop data, the mean amplitude for peaks in the trail-making and hidden objects tests, and the time to complete the trail-making and hidden objects tests were recorded. Participants’ scores were compared between the gaming and non-gaming groups and across participants. Our results showed that video game experts had fewer mean saccades in the Stroop test when compared to non-experts, both before and following the gaming intervention. There was a nonsignificant difference with regards to the trail making and hidden object tasks both between and within subjects. This study contributes to our understanding of the effects of video gaming experience on the breadth of attentional selection.
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