

The background of the poster is a scenic landscape at sunset. The sun is low on the horizon, casting a warm orange and yellow glow over a range of mountains. In the foreground, there are dark, jagged rocks. The sky transitions from a deep blue at the top to a bright orange near the sun.

Psychology & Gender Research Symposium

Department of Psychology

8th Annual
Fall 2020

Co-sponsors

The Center for Gender Studies
Office of Undergraduate
Research and Scholarship

Tuesday
November 10th

5:00 - 7:00 pm
Virtual Event

Psychology & Gender Research Symposium Fall 2020 Program

 Center for Gender Studies presentations

Oral Presentations

- Hayley Grossman, Kailynn Harris, Carly Pullen, Caelan King, & Phoebe M. Dubois 

*Pluralistic ignorance within transgender attitudes:
Consequences for needs satisfaction.*

Faculty Mentor: Jeff Aspelmeier

- Hayley Grossman, Carly Pullen, Kailynn Harris, Phoebe Dubois, and Caelan King 

*Trans-cending prejudice: Pluralistic ignorance within
attitudes toward trans people is moderated by political &
religious conservatism.*

Faculty Mentor: Jeff Aspelmeier

- Isabel Nolasco Escalante 

*Perception of leader likeability and effectiveness in gender x
feedback interaction.*

Faculty Mentor: Ye Ra Jeong

- Alli M. Schreiner & Alyssa K. Fitzwater 

The role of socioeconomic status and skipping class in teen school belonging scores.

Faculty Mentor: Jayne Bucy

Poster Presentations

- Destiny Allen, Sydney Wray, & Kendall McMullen
Pluralistic ignorance within attitudes toward abusive relationships: The potential moderating role of agreeableness.

Faculty Mentor: Jeff Aspelmeier

- Laneeka Banks, Sterling Bennett, & Kailynn Harris
Pluralistic ignorance about college hookups and the use of a video intervention to strengthen pluralistic ignorance.

Faculty Mentor: Jeff Aspelmeier

-Hannah Benz

The reminiscence bump effect in published biographies: A cohort study.

Faculty Mentor: Thomas Pierce

-Hannah Benz & Grace Flood

The reminiscence bump effect in published autobiographies.

Faculty Mentor: Thomas Pierce

-Autumn L. Buckler, Mia S. Purcell, Maggie T. Todd,
Angela W. Causey, Katelynn A. LaCombe, & Phoebe M.
Dubois

The relationship between negative life events and psychological functioning: The moderating role of attachment and resilience.

Faculty Mentor: Jeff Aspelmeier, Ann Elliott

-Cortney Busick

Expectations of communication through technology.

Faculty Mentor: Nicole Iannone

-Reid W. Clark, Janet C. Wilbur, & Rebecca H. McClung
*Pluralistic ignorance surrounding college drinking:
Pandemic edition.*
Faculty Mentor: Jeff Aspelmeier

- Brody D. Dawson & Ryan G. Taylor
Knowledge and its effects on curiosity and learning.
Faculty Mentor: Kathleen Arnold

-Phoebe Dubois, Caelan King, Carly Pullen, & Hailey
Scherer 
*Pluralistic ignorance within attitudes toward COVID related
health protection behaviors.*
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-Laura D. Griffith, Autumn L. Buckler, Claudia Paniagua-
Ugarte, Sarahbeth Roberts, & Hope A. Davis 
Effect of early maternal separation on behavior in rats.
Faculty Mentor: Pamela Jackson

-Mykaela Hagen 
*How gender identity salience and sexism relate to belonging
and support for Black Lives Matter.*
Faculty Mentor: Nicole Iannone

-Kimberlee Hall, Talia Neal, Jeremiah Vivero, & Katelynn
LaCombe
*Time series analysis of EEG recorded while attending class,
studying, and relaxing.*
Faculty Mentor: Thomas Pierce

-Nina Houston, Trenton Lester, & Jonah Lewis
Is pluralistic ignorance within comfort with discussing race moderated by geographic location?
Faculty Mentor: Jeff Aspelmeier

-Cheyenne M. James & Emily D. Siebach 
Self-stigmas impact on college students and the role of racism and sexism in treatment outcomes.
Faculty Mentor: Nick Lee

- Jonah Lewis
Investigation of situational judgement test scoring methods.
Faculty Mentor: Ye Ra Jeong

-Tarrah Nida, & Justin White
Pluralistic ignorance on attitudes of smoking.
Faculty Mentor: Jeff Aspelmeier

- Dillon Pastore, Patricia Bostock, & Lou Horinko
Pluralistic ignorance, attitudes about attending parties, and changes resulting from COVID-19.
Faculty Mentor: Jeff Aspelmeier

-Carly Pullen
Adjective endorsement of older adults.
Faculty Mentor: Jenessa Steele

-Carly Pullen
Attitudes towards unemployed due to COVID-19 versus before COVID-19.
Faculty Mentor: Nicole Iannone

-Mia S. Purcell, Maggie T. Todd, Autumn L. Buckler,
Angela W. Causey, Katelynn A. LaCombe, & Phoebe M.
Dubois

*The relationship between polyvictimization and substance
use: The moderating role of attachment.*

Faculty Mentor: Jeff Aspelmeier, Ann Elliott

- Hailey M. Scherer

*The relationship between the four sub-components of
empathy and bias towards people with parasocial
relationships.*

Faculty Mentor: Nicole Iannone

-Morgan Shumaker, Hannah Benz, Jeannie Tene, Ryan
Taylor

*Overcoming Obstacles: Adaptions to a Study Investigating
Essay-Enhanced Learning*

Faculty Mentor: Kathleen Arnold

-Morgan Shumaker, Felix Smith, & Nina Houston

*Learning in the time of COVID-19: An online transition to
examine strategic learning.*

Faculty Mentor: Kathleen Arnold

-Jeannie Tene, & Mykaela Hagen

*Studying the benefits of retrieval practice for high and low
structure builders.*

Faculty Mentor: Kathleen Arnold

-Caitlyn Thelen

Impostor phenomenon in STEM women: Do I belong here?

Faculty Mentor: Pei-Chun Tsai

-Erykah M. Vanier

Mental health in Guyana: A literature review.

Faculty Mentor: Ann Elliott

Abstracts

(Listed alphabetically by first author)

Destiny Allen, Sydney Wray, & Kendall McMullen

Pluralistic ignorance within attitudes toward abusive relationships: The potential moderating role of agreeableness.

Faculty Mentor: Jeff Aspelmeier

Poster Presentation

The present study investigates pluralistic ignorance within attitudes about abuse in relationships by comparing participants' ratings of comfort of abuse within personal relationships (DV; attitudes toward being a victim in an abusive relationship) made for one's self and made for one's peers (IV; Within-Subjects: Target of rating – ratings for self vs. ratings for others). The present study will also test whether pluralistic ignorance within attitudes about being a victim in abusive relationships is moderated agreeableness (MV; High vs. Low Agreeableness, between subjects). Approximately 100 undergraduate Radford University students will be recruited for the present study. For individuals with low levels of agreeableness, it is expected that there will be a moderate discrepancy between ratings of self and ratings of others; self-ratings will be significantly moderately higher than others. For individuals with high levels of agreeableness, it is expected that there will be a large discrepancy between ratings of self and rating of others; self-ratings will be higher than others.

Laneeka Banks, Sterling Bennett, & Kailynn Harris

Pluralistic ignorance about college hookups and the use of a video intervention to strengthen pluralistic ignorance.

Faculty Mentor: Jeff Aspelmeier

Poster Presentation

The proposed study investigates pluralistic ignorance within attitudes about college hookups by comparing participants' ratings of comfort with college hookups (DV; Assessing using an author constructed self-report measured adapted from Lambert et al., 2003) made for one's self and made for one's peers (IV; Within-Subjects: Target of rating – ratings for self vs. ratings for others). The present study will also test whether pluralistic ignorance within attitudes about college hookups is moderated by an intervention designed to increase participants' ratings of their peers' approval of hookups (MV; Within-Subjects: before and after intervention). Approximately 100 undergraduate students were recruited for the present study. Before the intervention, it is expected that self-ratings of comfort with college hookups will be significantly lower than comfort ratings made for peers; a pattern that reflects a high degree of pluralistic ignorance. After the intervention, it is expected that self-ratings of comfort with college hookups will still be significantly lower than the comfort ratings made for peers but will reflect an even

higher degree of pluralistic ignorance than before the intervention because ratings of peers' comfort with hookups will have increased compared to pre-intervention levels.

Hannah Benz

The reminiscence bump effect in published biographies: A cohort study.

Faculty Mentor: Thomas Pierce

Poster Presentation

The term reminiscence refers to the recall of memory of past experiences. In autobiographical memory research, the reminiscence bump period effect describes the tendency for older adults to recall more life events from their teens, twenties, and early thirties than any other decades of life. Previous research in our lab identified a reminiscence bump effect in narrative accounts of life events presented in 15 published autobiographies. The current study aims to investigate if a reminiscence bump effect can be observed in published biographies. In comparison to autobiographies, a biography investigates a person's life through a third-person perspective. Biographies are usually written by professional authors, and the collection of life events is based on subjective, historical research. To ensure historical accuracy, biographies tend to emphasize facts rather than emotions. This third-person perspective could potentially influence the presence of a reminiscence bump effect. To conduct this study, life events across 10 biographies are identified. Page number, age, and perception of every specific event is recorded and frequency distributions, as well as regression analyses, are created to analyze the proportion of events during the reminiscence period in comparison to the rest of the subject's lives. Results are then compared to those obtained from the previous study of autobiographies.

Hannah Benz & Grace Flood

The reminiscence bump effect in published autobiographies.

Faculty Mentor: Thomas Pierce

Poster Presentation

In autobiographical memory research, the reminiscence bump effect refers to the tendency for older adults to recall more life events from their teens, twenties, and early thirties than from other decades of life (e.g., Rubin, 1986). Participants in these studies are often encouraged to recall events quickly and spontaneously (e.g., Schroots, 2003). The purpose of this study was to determine if a reminiscence bump is observed in narrative accounts of life events presented in published autobiographies. 1831 life events were identified across 15 published autobiographies of eleven male and four female authors with a mean age of 67.2 years (standard deviation of 13.34). Page number, age, and perception of every specific event were recorded. Frequency distributions and regression analyses were created to analyze the proportion of events during the reminiscence period in comparison to the rest of their lives. Across all autobiographies, a greater proportion of life events were reported from the reminiscence bump period (18-32 years of life) than other periods of life. Events from the reminiscence bump period took up 45.52% of the pages in their books when in comparison, the reminiscence bump represents an average of 24% of the length of the authors' lives at the time of publication. The most common pattern recorded in autobiographies examined in this study was that a greater percentage of life events from late adolescence and early adulthood were present than from any other period of life, including a

recency effect. These data provide further replication of the existence of a reminiscence bump effect.

Autumn L. Buckler, Mia S. Purcell, Maggie T. Todd, Angela W. Causey, Katelynn A. LaCombe, & Phoebe M. Dubois

The relationship between negative life events and psychological functioning: The moderating role of attachment and resilience.

Faculty Mentor: Jeff Aspelmeier, Ann Elliott

Poster Presentation

This longitudinal study examines the buffering effect of adult attachment and resilience-related assets in the relationship between negative life events and psychological functioning. The present study tested whether women's attachment and resilience moderates the relationship between negative life events experienced during the semester and psychological functioning. It was expected participants with lower attachment security would exhibit stronger positive associations between negative life events and psychological symptomatology, compared to participants with greater attachment security. It was expected that a similar pattern would be seen in participants with lower levels of resilience-related assets in comparison to higher levels of resilience-related assets. In phase one of the study, 219 female participants completed measures of attachment (Experiences in Close Relationships; Brennan et al., 1998), resilience (Resiliency Scale for Children and Adolescents; Prince-Embry, 2007), and psychological functioning (Symptoms Checklist 90-Revised Derogatis, 1994) within the first five weeks of the semester. In the final four weeks of the semester, 89 women returned and completed measures of life adversity (Negative Life Events Scale for Students; Buri et al., 2015) and psychological symptomatology. Results revealed negative life events, anxious attachment, and emotional reactivity were positively associated with symptomatology in early adulthood. Resilience-related assets and attachment security moderated negative outcomes. Secure attachment, low emotional reactivity, and high mastery provided some protection from negative outcomes. For example, insecure women (high anxiety) who have experienced negative life events are at greater risk for experiencing more psychological symptoms compared to securely attached young women who have experienced similar negative life events.

Cortney Busick

Expectations of communication through technology.

Faculty Mentor: Nicole Iannone

Poster Presentation

This study explored the existence and effects of not having phone calls, text, and e-mail communication returned from family members, friends, bosses, and coworkers. Participants responded to a survey with questions about how they would feel if they didn't receive responses via these forms of electronic communication. Items assessed participants' need satisfaction on four fundamental needs (belonging, self-esteem, control, and meaningful existence). Participants also responded to a scale to assess their levels of fear of missing out (FOMO). Correlations and paired samples t-tests were conducted. It was found that one's needs would be less satisfied when a boss does not respond to an email than when a friend or family member does not respond to an email, $p < .02$, but there was no difference in need satisfaction when a boss or co-worker did not respond to the email, $p = .324$. Results also showed that participants had lower need satisfaction when their friend did not respond to their text than when their family member, co-

worker, or boss did not respond, $ps < .10$. Additionally, people felt worse when their phone call was not returned by their friend than their co-worker, $p = .021$, but there were no significant differences between other people. There were also significant negative correlations between levels of FOMO and need satisfaction across different communication and people. These findings suggest that people have specific expectations of who they expect to communicate with in specific ways and that people higher in FOMO feel worse when their communication is not returned.

Reid W. Clark, Janet C. Wilbur, & Rebecca H. McClung
Pluralistic ignorance surrounding college drinking: Pandemic edition.

Faculty Mentor: Jeff Aspelmeier

Poster Presentation

The proposed study investigates pluralistic ignorance (PI) within college drinking attitudes (DV: reported comfort with drinking attitudes; adapted from Prentice & Miller, 1993) pre-COVID and during COVID-19 (MV: within subjects, Pre-COVID vs. Post-COVID-Onset). PI will be demonstrated by comparing participants' own views of drinking with their perceptions of the average Radford University students' comfort with drinking (IV: within subjects, Target of Rating, self vs. others). Approximately 100 undergraduate Radford University students will be recruited for the present study. PI within drinking attitudes is expected to be moderated by whether participants are estimating attitudes before the COVID pandemic started or during the COVID pandemic. Pre-COVID, it is expected that the average self-ratings of comfort with college drinking will be significantly lower than ratings made for one's peers, a pattern consistent with pluralistic ignorance. After the onset of COVID, self-ratings are still expected to be significantly lower than ratings made for peers, but ratings made for peers are expected to be lower than pre-COVID ratings made for peers. Pre and post-onset ratings participants make for their own attitudes are not expected to significantly differ.

Brody D. Dawson & Ryan G. Taylor
Knowledge and its effects on curiosity and learning.

Faculty Mentor: Kathleen Arnold

Poster Presentation

People often think that if you are more curious about something, you have the potential to learn about it more easily, but what may be the underlying cause of this? The purpose of this study is to observe the effects of curiosity on learning. Our hypothesis is that the previously documented correlation between curiosity and learning (Kang et al., 2008) is actually due to a third variable – prior knowledge. The present study was designed to test this hypothesis. To test this, we manipulated both prior knowledge and curiosity to determine which variable, if any, has a causal effect on learning. We had participants study Doodles, which look like abstract drawings, and their labels, which give meaning to those drawings. We first manipulated prior knowledge by exposing our subjects to half of the Doodles (without telling them about the labels). We then had participants learn the Doodle-label pairs in a high or low curiosity condition; in the high-curiosity condition, participants saw the Doodle first and then saw the label, whereas in the low-curiosity condition they saw the Doodle and label together. On a delayed final test, measured participants' memory for the labels when shown the corresponding Doodles. We hypothesize

that having more prior knowledge will increase learning of the stimuli, but that increased curiosity will not increase learning. Our results will have implications for both basic learning theory and educational applications.

Phoebe Dubois, Caelan King, Carly Pullen, & Hailey Scherer 

Pluralistic ignorance within attitudes toward COVID related health protection behaviors.

Faculty Mentor: Jeff Aspelmeier

Poster Presentation

The present study investigates pluralistic ignorance (PI) with attitudes and behavioral intentions regarding COVID-19 related health protection behaviors (mask wearing and limiting social contact). PI occurs when group members misestimate group norms regarding the ideas, feelings, or actions of others, and when group members feel pressure to conform to the false norm. The resulting mismatch between public behaviors and private attitudes serve to further exacerbate misperceptions about the groups' true norms (O'Gorman, 1986; Lambert et al., 2003). A number of studies have found evidence of PI within college students' attitudes about health-related behaviors including drinking, sexual behavior, smoking, and drug use (Hines et al., 2002; Lambert et al., 2003; Prentice & Miller, 1993). For example, college students reported being less comfortable with campus drinking and sexual norms. Gender differences have also been observed within pluralistic ignorance within college students' attitudes towards drinking and sex/hookups. The present study asks participants to respond to questions about their own attitudes and their perceptions of other peoples' attitudes regarding mask wearing, social distancing, and going out in public. Attitudes about college drinking and hookups will also be assessed. It is expected that participants will underestimate the degree to which their peers are comfortable with engaging in health protective behaviors (mask wearing and limiting social contact with others). Additionally, the present study test whether PI within attitudes about mask wearing and limiting social contact moderates PI within other health related domains (i.e., drinking and hookups). These effects will be evaluated for possible gender differences as well.

Isabel Nolasco Escalante 

Perception of leader likeability and effectiveness in gender x feedback interaction.

Faculty Mentor: Ye Ra Jeong

Oral Presentation

The phenomenon of few women holding upper management positions could be attributed to a perceived dissonance of traditional gender roles and leader roles. The traditional roles of women being those of nurturance and politeness seem to be incompatible with the assertiveness that a leader is expected to have. In order for female leaders to ease negative reactions such as discounted competence and likeability, they may have to utilize a linguistic style that is in line with traditional gender norms. In this study, the interaction between leader gender, linguistic style, and perceptions of the leader was observed. Participants were instructed to read a scenario where they receive an email about performance evaluation from their hypothetical supervisor. The scenarios differed in terms of supervisor gender and linguistic style, being in an assertive or communal tone. Participants' perceived effectiveness and likeability of the supervisor were collected through a questionnaire. Two-way ANOVA design was used to examine the interaction between the factors of gender and feedback language. Data from 125 participants was collected via SONA. There was no significant difference between assertiveness and tentativeness in leader likeability or effectiveness. However, male leaders were generally rated more favorably than

female leaders. Female leaders were perceived less likable and effective, regardless of their linguistic style. In future studies, a clearer manipulation of the linguistic styles could allow for improved assessment of its interactions with gender, leader likeability and effectiveness.

Laura D. Griffith, Autumn L. Buckler, Claudia Paniagua-Ugarte, Sarahbeth Roberts, & Hope A. Davis 

Effect of early maternal separation on behavior in rats.

Faculty Mentor: Pamela Jackson

Poster Presentation

Maternal contact is critical during the postnatal period for appropriate physical and psychological development. Maternal separation early in life has been found to have significant negative effects on physical and behavioral health. Further research on maternal separation is needed to understand how situations in which children have limited contact with a maternal figure, such as foster care or NICU, may affect them later in life. The purpose of this study is to explore the effects of early maternal separation on the behavioral and social development of rats, and to determine whether contact with siblings helps to lessen these effects. Litters were assigned to 180-minute separations or 15-minute control separations which took place over postnatal days 1-14. Within each litter, pups were assigned to either be isolated in a cage with the dam (mother) in the adjacent side of the cage, separated by a barrier, or in a cage with the dam absent. Pups were then assigned to be single or group-housed. Group-housed pups were placed in isolation with siblings, while single-housed pups were isolated alone. Results found that pups separated from the dam for 180 minutes showed lower body weight and increased discomfort. Significant gender differences were also found. Next steps include performing social and behavioral tasks during the adolescent phase to determine if the isolation has lasting effects on the pups.

Hayley Grossman, Kailynn Harris, Carly Pullen, Caelan King, & Phoebe M. Dubois 

Pluralistic ignorance within transgender attitudes: Consequences for needs satisfaction.

Faculty Mentor: Jeff Aspelmeier

Oral Presentation

The present study investigates pluralistic ignorance (PI) within attitudes toward transgender individuals and whether awareness of PI results in changes in the participants' needs satisfaction. PI occurs when members of a collective mistakenly assume their own attitudes are different from those of other members of the group. This discrepancy creates pressure to conform to the imaginary group standard (Miller & McFarland, 1987), which reinforces the group's perception of the false norm. PI may also create other pressures to elevate the discrepancy between self and others such as dissonance related attitude change or feelings of alienation (Prentice & Miller, 1993). Participants ($n = 108$) completed needs satisfaction measures (Williams, 2009) before and after reporting their own attitudes toward transgender individuals and estimating the attitudes of their peers (order randomized). As expected, participants' transgender attitudes were significantly more positive than they believed their peers to be, $t(107) = -8.76$, $p < .001$, $d = .85$, a pattern consistent with PI. Contrary to hypotheses, participants' needs satisfaction, in particular, the participants' sense of belonging, increased, rather than decreased, after completing

the pluralistic ignorance assessment, $t(107) = -4.22$, $p = .001$, $d = .41$. These results contrast previous studies showing that PI is accompanied by feelings of alienation (Prentice & Miller, 1993).

Hayley Grossman, Carly Pullen, Kailynn Harris, Phoebe Dubois, & Caelan King 
Trans-cending prejudice: Pluralistic ignorance within attitudes toward trans people is moderated by political & religious conservatism.

Faculty Mentor: Jeff Aspelmeier

Oral Presentation

The present study tests whether pluralistic ignorance (PI) exists within attitudes about transgender individuals, and whether PI is moderated by either religious or political beliefs. PI occurs when group members erroneously believe their private attitudes differ from attitudes held by others in their group (Miller & Prentice, 1994). The term ‘transgender’ is considered an umbrella term which describes people whose gender identity does not align with the gender assigned at birth (APA, 2011). It was hypothesized that participants’ own attitudes toward transgender individuals will be more positive than attitudes they believe their peers to hold, and that religious and political conservatives will report more prejudiced attitudes for both themselves and for others, relative to liberals. Finally, politically and religiously liberal participants are expected to show a stronger PI effect than conservatives. Liberals’ self-ratings are expected to be more positive than ratings made for their peers, whereas conservatives hold equally prejudicial attitudes. Participants completed measures of their own and peers’ trans prejudice (e.g., Barbir et al., 2017), in addition to measures of political and religious conservatism (Sidanius, 1991; Altemeyer & Hunsberger, 1992). A series of 2 (target: self vs. other) x 2 (political/religious conservatism: high vs. low) mixed-model factorial ANOVAs identified a strong PI effect: participants reported significantly less trans prejudice than they expected their peers to report, $\eta^2_{\text{partial}} = .43$. Political and religious conservatism moderated the PI effect, $\eta^2_{\text{partial}} = .05$ and $\eta^2_{\text{partial}} = .06$, respectively. Liberal participants show a stronger discrepancy between self and other attitudes toward trans people relative to conservatives, who reported significantly more prejudice than liberals. Both liberals and conservatives show high agreement about other college students’ degree of prejudice.

Mykaela Hagen 

How gender identity salience and sexism relate to belonging and support for Black Lives Matter.

Faculty Mentor: Nicole Iannone

Poster Presentation

This is preliminary research of a thesis project that examines ideas around gender identity salience and sense of belonging on campus. Participants ($n=197$) completed a survey assessing gender identity salience, belonging on campus, Ambivalent and Modern Sexism, political views, and BLM support. Identity salience and belonging on campus ($r=.22$, $p<.01$) were positively

correlated. When accounting for other variables (gender, political views, sexism) identity salience was the strongest predictor of belonging on campus ($\beta=.25, p=.005$) and accounted for additional variability over and above the relative contributions of the other variables ($r=.05, p=.005$). This suggests that the salience of one's gender identity may influence their belonging on campus. Both sexism measures were negatively correlated with BLM support ($r_s<-.50, p_s<.01$). When accounting for other variables (political views, gender), Modern Sexism remained a strong predictor of BLM support ($\beta=-.33, p<.001$) and accounted for additional variability over and above the relative contributions of the other variables ($r=.06, p<.001$). These results suggest that sexism is strongly related to less support for BLM.

Kimberlee Hall, Talia Neal, Jeremiah Vivero, & Katelynn LaCombe

Time series analysis of EEG recorded while attending class, studying, and relaxing.

Faculty Mentor: Thomas Pierce

Poster Presentation

This study investigated cycles in EEG activity indicating cognitive engagement across three conditions: lecture-based classes, studying, and relaxing. Twelve EEG records were obtained from each of participants: four while attending class, four while studying, and four during a period of relaxation. Two-second segments of artifact-free EEG were extracted every five minutes throughout the length of each recording. A spectral analysis was performed on each EEG segment to calculate the degree to which each detectable frequency between 1 and 50 Hz was present. To determine the relative contributions of slow and fast wave frequencies to EEG waveforms, the values for frequency and power were converted to logarithmic units. We used linear regression to predict the log of power from the log of frequency. We used the slope of this regression line as our measure of the degree to which high frequency waves were present in an EEG segment, relative to the presence of slow frequency waves. Slopes of plots of the log of frequency against the log of EEG power were calculated for EEG segments obtained every five minutes across each recording period. Analyses will explore 1) the degree to which patterns of change in EEG activity are consistent within participants across multiple recordings and 2) differences in the length of cycles in EEG activity between recording conditions.

Nina Houston, Trenton Lester, & Jonah Lewis

Is pluralistic ignorance within comfort with discussing race moderated by geographic location?

Faculty Mentor: Jeff Aspelmeier

Poster Presentation

The present study investigates pluralistic ignorance within attitudes about discussing prejudice. The study will compare participants' ratings of comfort with discussing prejudice (DV: Comfort level will be measured using a self-report inventory) with how comfortable they rate other individuals of the same ethnicity and those of different ethnicities (IV: within subjects design – three conditions: self-rating, other Radford University students of the same ethnicity as the participant other Radford University students of a different ethnicity from the participant). This study will also measure the extent to which these attitudes are moderated by the participants' geographical origin (MV: between-subjects design – Rural area vs Urban area). Approximately 100 undergraduate Radford University students will be recruited for the present study. It's

expected that individuals from rural origins will rate themselves as far less comfortable than others of both the same ethnicity and different ethnicities. This discrepancy is expected to be larger between self-ratings and ratings of other ethnicities (the comfort rating will be extremely high for those of different ethnicities), than that of self-rating and others of the same ethnicity. Participants from urban areas are expected to follow the same general trend, with the exception being that a higher self-rating of comfort (compared to self-ratings made by participants from rural areas) and smaller discrepancies between self-ratings and the rating of others (compared to the discrepancy observed among rural participants) are expected.

Cheyenne M. James & Emily D. Siebach 

Self-stigmas impact on college students and the role of racism and sexism in treatment outcomes.

Faculty Mentor: Nick Lee

Poster Presentation

A professional issue in counseling psychology today is the number of college students not accessing mental health services due in part to self-stigma. Research indicates that there is a relationship between an individual's level of self-stigma and their willingness to seek mental health treatment (Clement et al., 2014; Guarneri et al., 2019). Research also indicates that racism and sexism play critical roles in an individual's self-stigma in that people of color are more likely to experience self-stigma and have lower rates of seeking mental-health treatment than their White counterparts (Eghaneyan & Murphy, 2020, Gee et al., 2020, Guarneri et al., 2019). The intersectionality between gender, race, self-stigma create a significant barrier to treatment seeking behaviors (Connell et al., 2019; Narendorf et al., 2018). Valid and reliable self-stigma measures can be used to determine the amount of self-stigma a population (i.e., college students) is experiencing so that clinicians and other staff on campus can address and mitigate these specific concerns. Clinical implications for counseling psychologists working in counseling centers or on campuses will be reviewed with attention given to specific interventions at reducing self-stigma. Interventions to increase multiculturalism and inclusion of racial and sexual minorities are also discussed.

Jonah Lewis

Investigation of situational judgement test scoring methods.

Faculty Mentor: Ye Ra Jeong

Poster Presentation

The proposed study aims to find the degree to which the scoring methods of situational judgment test (SJT) affect how personality traits are measured. To investigate the best way to use SJT in measuring personality traits, different combinations of four question formats (Would-do, Should-do, Internal Trait Policy, and self-report Likert scale) and three scoring methods (Traditional, ITP Trait scoring method, or ITP effectiveness scoring method) were compared. The study will include two samples. One sample, collected from Radford SONA system, has 412 participants, and another sample, collected from CMU SONA system, has 552 participants. More data collection will be conducted to gather managers' effectiveness ratings via Amazon Mechanical Turk. Preliminary analyses indicate that the Would-do question format, although minimal, best

represents personality traits, but there were no significant differences between traditional and ITP Trait scoring methods. Further analyses upon data collection will examine whether ITP effective scoring method presents any benefit above and beyond other methods in the study.

Tarrah Nida & Justin White

Pluralistic ignorance on attitudes of smoking.

Faculty Mentor: Jeff Aspelmeier

Poster Presentation

The present study investigates pluralistic ignorance within attitudes about smoking by comparing participants' ratings of comfort with smoking (DV; Assessing using an author constructed multi-item measure) made for one's self and made for one's peers (IV; Within-subjects: Target of rating - ratings for self vs. rating for others). The study will also test whether pluralistic ignorance within attitudes about smoking is moderated by method of inhaling (MV; within subjects: Vaping vs. Cigarettes). Approximately 100 undergraduate Radford University students will be recruited for the present study. For vaping, it is expected that self-ratings of comfort with smoking will be significantly lower than comfort ratings made for peers; a pattern that reflects a high degree of pluralistic ignorance. For cigarettes, it is expected that self-ratings of comfort with smoking will be significantly lower than comfort ratings made for peers; a pattern that also reflects a high degree of pluralistic ignorance. It is expected that the discrepancy between self and other ratings of comfort with cigarette smoking will be larger than the discrepancy observed between self and other attitudes about vaping. This assumption is based on the prediction that participants will rate others to be more comfortable with vaping than smoking cigarettes, while participants will rate themselves significantly less comfortable with cigarettes than vaping.

Dillon Pastore, Patricia Bostock, & Lou Horinko

Pluralistic ignorance, attitudes about attending parties, and changes resulting from COVID-19.

Faculty Mentor: Jeff Aspelmeier

Poster Presentation

The present study investigates pluralistic ignorance within attitudes about college drinking by comparing participants' ratings of comfort with going out and drinking alcohol (DV; assessing using an author constructed seven-item, self-report measure) made for one's self and made for one's peers (IV; within-subjects; target of rating - rating for self vs. rating for others). The present study will also test whether pluralistic ignorance within attitudes about college drinking is moderated by the onset of the COVID-19 pandemic (MV; pre-COVID-19 and during COVID-19). Approximately 100 participants will be recruited through the Psychology Department Research Participant Pool. Prior to COVID-19, it is expected that self-ratings made for peers, a pattern that reflects a high degree of pluralistic ignorance. In comparison, it is expected that during the COVID-19 pandemic, self-ratings of comfort with going out and drinking will decrease compared to pre-COVID-19 rating, while the comfort ratings made for peers will remain the same, a pattern that reflects a significantly higher degree of pluralistic ignorance. The future implications of this study include the increased understanding of the possible effects of a global pandemic on the lives of college students and the concrete norms surrounding them.

Carly Pullen

Adjective endorsement of older adults.

Faculty Mentor: Jenessa Steele

Poster Presentation

There is an imbalance in adjective assignment for older adults, Fiske and colleagues (2007) found both positive and negative adjectives that surround the older adult community. Their Stereotype Content Model found that worldwide, older adults are most often categorized as warm and incompetent (Fiske et al., 2007). They categorized warmth as friendliness and trustworthiness. Competence was categorized as skilled, and intelligent. Fiske and colleagues (2002) suggested that stereotype content could be a result of a shared public view of groups, to show consistency in attitudes. Fiske and colleagues (2002) found when participants were asked about gender, males were rated significantly more competent compared to females. Females, on the other hand, were rated significantly more warm compared to males. The current study was a pilot test, done to assess if the video clips depicted older adults in a way that matched with each condition. A sample of seven ($n = 7$) participants watched eight video clip depicting female and male older adults in stereotype congruent (warm and incompetent) ways and stereotype challenged ways (cold and competent). After viewing each video clip participants rated how much they agreed that a series of five adjectives. Although the sample size was very small, we were able to see that the participants were endorsing the adjectives that matched the condition. This showed us that the video clips accurately depicted older adults in stereotype congruent and challenged ways.

Carly Pullen

Attitudes towards unemployed due to COVID-19 versus before COVID-19.

Faculty Mentor: Nicole Iannone

Poster Presentation

Before the pandemic roughly six million Americans were unemployed. As quickly as Covid-19 spread, people lost their jobs, impacting 14 million Americans. Mcfayden (1998) found that people's attitudes about unemployed individuals were negative and based on stereotypes. The goal of this study was to examine differences in attitudes towards unemployed individuals before Covid-19 and unemployed individuals due to Covid-19. We predicted that people who are unemployed due to Covid-19 would be viewed more positively compared to those who were unemployed before Covid-19. Participants ($n=81$) completed 13 feeling thermometers (11-point scales) reporting their attitudes towards different groups such as employed individuals, unemployed individuals before Covid-19, unemployed individuals due to Covid-19, spring breakers, and medical professionals. Participants rated people unemployed due to Covid-19 ($M=8.51$, $SD=2.35$) just as positively as employed people ($M=8.68$, $SD=2.09$), $p=.472$. We also found that people unemployed before covid-19 were viewed more negatively ($M=6.55$, $SD=2.60$) than all groups ($ps<.01$) except for spring breakers ($M=5.62$, $SD=2.50$) who were viewed more negatively than those unemployed before Covid-19 ($p=.016$). On the other hand, those who were unemployed because of Covid-19 were viewed more positively than seven of the groups, although only significantly more positively than four of the groups ($ps<.04$), and not

significantly more negatively than any group ($p > .11$). These findings show the bias that people hold towards unemployed people, unless there is an “excuse” for the unemployment.

Mia S. Purcell, Maggie T. Todd, Autumn L. Buckler, Angela W. Causey, Katelynn A. LaCombe, & Phoebe M. Dubois

The relationship between polyvictimization and substance use: The moderating role of attachment.

Faculty Mentor: Jeff Aspelmeier, Ann Elliott

Poster Presentation

The present study tests whether adult attachment moderates the relationship between retrospective reports of childhood polyvictimization and self-reports of current substance use. A sample of 216 undergraduates completed measures of childhood victimization (Hamby et al., 2007), alcohol and drug abuse (Selzer, 1971, Skinner, 1982), and adult attachment (Brennan et al., 1998). Polyvictimization and substance use were strongly and positively associated. Attachment avoidance was significantly, moderately, and positively associated with substance use, but attachment anxiety was not. Attachment avoidance and anxiety were both modestly associated with polyvictimization. Participants' age, history of receiving counseling, and history of taking psychotherapeutic medications were all positively associated with substance use and were included as covariates in the tests of moderation. Attachment avoidance significantly moderated the negative effects of polyvictimization. Participants reporting high polyvictimization and high attachment avoidance also report highest levels of substance use in the sample. Participants reporting high polyvictimization but low attachment avoidance reported substantially lower levels of substance use than their highly victimized peers.

Hailey M. Scherer

The relationship between the four sub-components of empathy and bias towards people with parasocial relationships.

Faculty Mentor: Nicole Iannone

Poster Presentation

The goal of the current study was to examine bias towards parasocial relationships (PSRs; one-sided relationships with media figures) and how empathy may relate to these biases. Empathy includes four sub-components (Davis, 1980). Perspective-taking is the tendency of people to adopt others' points of views. Fantasy is similar to perspective-taking but involves understanding the behaviors and feelings of fictional characters. Empathic concern relates to feeling sympathy for others. Personal distress is whether a person gets uneasy and anxious with others' problems. Participants ($N=151$) completed a survey that included questions about bias towards people with PSRs (e.g., “People who have parasocial relationships lack good social skills”) and a scale to assess the four sub-components of empathy (Davis, 1980). Bias towards PSRs and perspective-taking and fantasy were negatively correlated ($r < -.21$, $p < .02$), personal distress was marginally negatively correlated ($r = -.16$, $p = .064$), and empathic concern was not significantly correlated

($p > .29$). This suggests that being able to put yourself into others' shoes as well as understanding fictional characters' perspectives is related to viewing PSRs more positively.

Alli M. Schreiner & Alyssa K. Fitzwater

The role of socioeconomic status and skipping class in teen school belonging scores.

Faculty Mentor: Jayne Bucy

Oral Presentation

In the teenage years, one of the biggest responsibilities one has is going to school. Not just getting to school but staying there for the whole day. Extracurricular activities and the relationships one has at school draws students to stay in school. This study looks at the relationship between freshmen socioeconomic status and skipping class, and its impact on level of school belongingness in their senior year. A total of 17,810 high school freshmen following through their senior year were included in this study. The interaction effect between SES, skipping class, and level of school belongingness was not statistically significant. This paper dives further into the relationship between socioeconomic status, skipping class, and school belongingness.

Morgan Shumaker, Hannah Benz, Jeannie Tene, & Ryan Taylor

Overcoming Obstacles: Adaptions to a Study Investigating Essay-Enhanced Learning

Faculty Mentor: Kathleen Arnold

Poster Presentation

Previous research has shown that retrieving information from memory enhances learning. In contrast to restudying, retrieval practice additionally increases the retention of information. Closed-book essay writing, examined in the current study, is a learning activity that involves retrieval processing as well as elaborative and organizational processes. When compared to traditional testing and non-retrieval-based learning activities, essay writing possibly increases learning to a greater extent and fosters a deeper understanding of information. The current study examines the effects of an outline intervention on improving essay writing, enhancing learning, and thus, improving memory. We also aim to examine how structure-building ability moderates the benefit of the outline intervention. Participants read selected passages about bats and vaccinations and wrote an essay on each either with or without the outline. Two days later, participants completed a test on the passages. Past results have shown a nonsignificant trend such that participants in the outline condition did numerically better on inference multiple-choice questions. However, there has been no difference between performance in low- versus high-structure-builders. With the aim to adapt the methods to new COVID19 safety measurements, while also implementing more power through simpler, updated material and a holistic grading rubric addressing elaboration and organization, the study is continuing to investigate the effect of an outline intervention in essay writing.

Morgan Shumaker, Felix Smith, & Nina Houston

Learning in the time of COVID-19: An online transition to examine strategic learning.

Faculty Mentor: Kathleen Arnold

Poster Presentation

When studying for a big exam, students often have limited time and must determine what information to study and for how long to study it. Students can effectively make such decisions by learning to be strategic. That is, students can learn to prioritize items that are of higher value (i.e., items that will likely be on a future test). We examine how learners' ability to be selective in their learning can improve. Specifically, we examine how testing and feedback on earlier material can help learners become selective when studying new information. Participants are sorted into one of 4 conditions: test with feedback (TF), test with no feedback (TNF), halfway test (HT) and no test (NT). Participants are given 6 lists consisting of 20 words each. Each word is assigned a point value ranging from 1-10, with the objective to remember words that will total in the highest possible point value. The TF group receives a free recall test with feedback (how many points they earned) after each of the 6 lists. In the TNF group, participants are tested after each list without receiving any feedback. The HT group receives a test only after List 3, and again after List 6. Finally, the NT group does not receive a test until List 6. We anticipate that both testing and feedback will lead to increased selectivity such that participants in the testing and feedback conditions will be better able to remember the words associated with the highest point values.

Jeannie Tene & Mykaela Hagen

Studying the benefits of retrieval practice for high and low structure builders.

Faculty Mentor: Kathleen Arnold

Poster Presentation

Retrieving information from memory enhances learning and prevents forgetting (Roediger & Karpicke, 2006), but not all learners may benefit from this effect equally and under all circumstances. The current research investigates if learning from retrieval is mediated by individual differences in structure building ability, which is one's ability to build a mental model when comprehending information presented in a narrative form (Gernsbacher, Varner, & Faust, 1990). Higher structure building ability may increase benefits from retrieval because retrieval practice is more successful, but those with lower structure building ability may benefit more because it can encourage deeper processing. Additionally, the current study examines how immediate, correct feedback enhances the retrieval practice effect differently across learners with different structure-building ability. Participants were asked to read a passage about bats and then answered four questions (with or without feedback) about passage facts and studied four statements about passage facts (counterbalanced across conditions). After a delay of 1-2 days, the participants answered eight questions: four questions whose answers were stated in the passage (same as questions in Session 1) and four inference questions that were derived from the facts questioned or studied in session one. They also completed the Multi-Media Comprehension

Battery (MMCB), which measures structure-building ability. We predict a retrieval practice effect on both fact and inference questions for high structure builders, with or without feedback, but for low structure builders, we expect a retrieval practice effect only in the feedback condition.

Caitlyn Thelen

Impostor phenomenon in STEM women: Do I belong here?

Faculty Mentor: Pei-Chun Tsai

Poster Presentation

Women continue to be underrepresented in science, technology, engineering, and mathematics (STEM) fields (Farrell et al., 2020), but why? Avolio and colleagues (2020) conducted a literature review to identify the most significant barriers to women in STEM fields. In their review, they found two models that explain the underrepresentation of women in STEM fields. The first model states that gender disparities result from women having fewer chances and opportunities in these fields (Sonnert, 1999). The second model proposes that gender disparities are caused by social and structural factors such as women's self-expectations, stereotypes, threat, and a lack of role models in STEM fields to name a few (Ahuja, 2002). Impostor phenomenon (IP), characterized by difficulty internalizing success, feeling like a fraud, and fear of one's true abilities being discovered (Clance & Imes, 1978) may be one of those self-expectations that serves as a barrier to women's representation in STEM fields.

This poster provides a brief overview of some of the factors that may be contributing to the underrepresentation of women in STEM fields, focusing on the impact of IP. IP has been found to contribute to low self-efficacy, something that is commonly observed in women in STEM fields (Neureiter & Traut-Mattausch, 2016). Because self-efficacy has been thought to mediate the relationship between gender and educational and vocational choices (Jansen et al., 2020), better understanding the impact of IP on female STEM students and how to reduce it may be important in increasing the representation of women in STEM fields.

Erykah M. Vanier

Mental health in Guyana: A literature review.

Faculty Mentor: Ann Elliott

Poster Presentation

This presentation examines the past, present, and future directions of mental health policies in Guyana. Very few scholarly or peer reviewed publications were identified using Google Scholar, PsycInfo or PsycArticles. Thus, we examined additional online sources including Guyanese newspaper sites, data from university and hospital websites, and official reports from the Guyanese government. First, we examine the history of mental health laws enacted in Guyana, community perspectives on mental health, the lack of medical staff training in mental health, and treatment of patients in mental wards. Details about the National Psychiatric Hospital and the Georgetown Hospital Corporation as described in the WHO-AIMS Report on the Mental Health System in Guyana will be discussed. Next, the poster reviews current practices and more recent views on mental health as well as training opportunities for mental health through the University of Guyana and the American University of Peace Studies. Finally, the poster reviews future

policies, laws and vision regarding Guyana's health for 2020 based on the Ministry of Health's National Mental Health Action Plan (2015-2020) and the National Suicide Prevention Plan (2015-2020).