



*Classes of 2021  
& 2022*

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**Honors Theses**

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**DEPARTMENT OF  
PSYCHOLOGY**

**Chloe Hessler**, *An Investigation of a Metacognitive Model of Food Addiction*

Faculty Sponsor: Ashley Borders

Committee Members: Joanna Herres, Margaret Martinetti



The present study aims to establish a relationship between rumination and food addiction (FA), as well as to develop a metacognitive model of FA. It is imperative to learn more about FA in order to develop treatment strategies for those suffering, as it is currently an understudied variable. Recently, many researchers have applied the metacognitive model to a variety of clinical outcomes. This might be helpful in explaining FA because it was suggested that the model could be adapted to fit substance use disorders (Spada et al., 2013). This study consisted of a two-time point online survey with several self-report questionnaires that were completed by 189 undergraduate students. The questionnaires measured rumination, positive and negative metacognitive beliefs, and FA. Analyses showed that rumination predicted more FA, which is a relationship that was not previously established. Furthermore, sequential mediation analyses found support for a metacognitive model of FA.

**Brandon Hoang**, *The Impacts of Bilingualism and the Spacing Effect of Language Learning*



Faculty Sponsor: Lisa Grimm

Committee Members: He Len Chung, Jean Kirnan

The metacognitive model of mood disorders posits that mood and anxiety disorders arise from maintained states of repetitive negative thinking, and that these states are perpetuated by metacognitive beliefs. While mediational support exists for this model with depression as an outcome, mediational support for this model with anxiety as an outcome is lacking. This study comprises 4 mediational models, testing the metacognitive model for anxiety and depression. Metacognitive therapy also describes mindfulness as being key to halting these processes, but there is little empirical evidence on how it operates in the model. As such, this study also investigates mindfulness as a moderator of these models. Support was found for the metacognitive model predicting depressive and anxiety symptoms. Mindfulness only moderated the effect of positive beliefs about rumination on depressive symptoms, such that individuals with high mindfulness demonstrated a lower link between beliefs and symptoms.

**Anagha Kalelkar**, *The Distinction Between Perceptual and Semantic Priming in the Brain using ERPs*

Faculty Sponsor: Andrew Leynes

Committee Members: Margaret Ruddy, Jeanine Vivona



Familiarity, a form of recognition memory, is extensively studied in neuroscience. The current study investigated the relationship between familiarity, priming, and fluency using event-related potentials (ERPs). Conceptual primes, perceptual primes, and match primes were used. Familiarity was measured through the FN400 ERP component. Participants completed a lexical decision-making task in a study phase and testing phase. In the study phase, participants were asked to count the number of vowels in each word presented. In the testing phase, participants were asked to judge if the word presented was from the study phase (“old”) or never seen before (“new”) and to rate their confidence in their judgment. An increase in the number of old responses is associated with increased familiarity and fluency. Results indicated match primes increased fluency more than conceptual and perceptual primes. Additionally, match primes increased familiarity indicated through a more positive FN400 effect.

**Moira Kellaher**, *Mindfulness as a Moderator in the Metacognitive Model of Mood Disorders*



Faculty Sponsor: Ashley Borders

Committee Members: Joanna Herres, He Le Chung

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depression. Metacognitive therapy also describes mindfulness as being key to halting these processes, but there is little empirical evidence on how it operates in the model. As such, this study also investigates mindfulness as a moderator of these models. Support was found for the metacognitive model predicting depressive and anxiety symptoms. Mindfulness only moderated the effect of positive beliefs about rumination on depressive symptoms, such that individuals with high mindfulness demonstrated a lower link between beliefs and symptoms.

**Rebecca Kurnellas**, *Behavioral Economic Alcohol Demand in College Students: A Multi-Site Investigation*



Faculty Sponsor: Margaret Martinetti  
Committee Members: Joanna Herres, Jeanine Vivona

College athletes represent a high-risk group for heavy alcohol consumption and negative alcohol-related consequences. Although access to low-cost alcohol is a known risk factor for college drinking, no study has examined how price affects consumption in student-athletes. In this study, we examined behavioral economic demand for alcohol in student-athletes and non-athletes as a function of gender at three universities. A total of 196 participants completed the Alcohol Purchase Task (APT) and measures of alcohol use. We found that demand was relatively elastic overall, but men had higher demand intensity than women and athletes had higher maximum expenditure compared with non-athletes. We also found that men reported significantly higher alcohol consumption than women. These findings further support the utility of alcohol price increases in college drinking environments as a harm-reduction strategy, particularly for students at higher risk.

**Maya Nandy**, *Nutrition For All: How Autonomy, Socioeconomic Status, and a Nudge Influences Food Choice*

Faculty Sponsor: John Ruscio  
Committee Members: Lisa Grimm, Ashley Borders

Restaurant menus provide calorie information in hopes to reduce customers' calorie intake, but it does not provide any other information a consumer might desire. This study explores how giving consumers the autonomy to choose the nutritional information they want to see on a menu, would affect nutrient intake, what influences food choices, and the purchasing satisfaction across socioeconomic status (SES). Participants were randomized into an SES priming condition then into a menu condition with (1) only calorie, or (2) calorie, fat, sugar, protein, and allergen information, or (3) any nutritional information they desired plus calorie information. Most individuals were not influenced by nutritional information, but higher SES participants claimed nutritional information influenced their choices more than lower SES participants even though nutrient intake did not differ across SES. The total nutrient intake, purchasing satisfaction, and influence of menu information did not differ across menu type or priming condition.



**Bernard Pereda**, *Gender Differences in the Direction of Effects between Depressive Symptoms and Alcohol-Related Harms Among College Students*

Faculty Sponsor: Joanna Herres

Committee Members: Margaret Martinetti, Ashley Borders

Co-occurring depressive symptoms (DSs) and alcohol-related harms (ARHs) are common among college students, but their sequential and predictive relationship remains unclear. The present study addressed limitations in prior research on the directional relationship between DSs and ARHs and examined whether this relationship differed between men and women. Students (N = 691) participated in an online survey at three time points over the academic year. A cross-lagged panel model tested whether one variable predicted the other variable at a later time point. Tests of model invariance examined differences in direction of effects for men and women. ARHs at the beginning of the fall semester increased risk for DSs the following semester. For men only, DSs at the beginning of the fall semester predicted more ARHs at the end of the fall. Findings offer preliminary evidence that directional relationships between DSs and ARHs differ between men and women.



**Hafsah Shaik**, *Event-Related Potential Evidence for the Distinction of Prime Effects*



Faculty Sponsor: Andrew Leynes

Committee Members: Margaret Martinetti, Jessica Barnack-Tavlaris

Priming, presenting a stimulus before another stimulus, has been shown to influence fluency, the ease of processing. Recent studies have found priming types to have different, unexpected effects on fluency. The current study further tested several types of primes, including unrelated word primes as a control condition, and found that certain types have completely opposing ERP and behavioral effects to others.

**Jessica Turner**, *Feelings of Betrayal Following Sexual Assault by a Romantic Partner Predict More Severe Posttraumatic Stress Symptoms*

Faculty Sponsor: Joanna Herres

Committee Members: Ashley Borders, Candice Feiring

Sexual assault is a prevalent issue among college students and can be perpetrated by romantic partners. Students who are assaulted by a romantic partner may experience feelings of betrayal following their assault, which may increase their risk of posttraumatic stress symptoms (PTSS). I hypothesized that feelings of betrayal would mediate more PTSS among victims of romantic partner sexual assault (RPSA). I also tested whether general feelings of interpersonal trust protected students against the effects of betrayal on PTSS severity. A total of 1,294 undergraduates completed an online survey. Victims of RPSA ( $n = 49$ ) experienced more betrayal than victims of non-RPSA ( $n = 164$ ), which, in turn, predicted more severe PTSS. Interpersonal trust did not moderate the relationship between betrayal and PTSS. Future research should test the mediation model using longitudinal data and examine direct effects of interpersonal trust on PTSS severity.

**Anushka Vishahan**, *How does the Majority-Minority Demographic shift impact White Americans' Attitudes towards Voting Rights Legislation?*



Faculty Sponsor: Jarret Crawford

Committee Members: Daniel Bowen, Shaun Wiley

A growing amount of research on how White Americans will react to the impending majority-minority shift - when members of racial/ethnic minority groups will exceed half of the population - suggests that they would support anti-minority views when threatened by the demographic shift. Additionally, despite there being no widespread voter fraud during the 2020 election, several states introduced provisions that restrict voting access. We report 2 pilot studies assessing a support for voting restrictions and a status threat measure with evaluative and perceptual subscales, and a primary study assessing how making Whites aware of the demographic shift relates to their support for voting restrictions. We find that racial shift reminders, when it provokes the feeling of status threat, predicts support for restrictive voting rights. Furthermore, while the Perceptual subscale reflects feelings of threat in participants, the Evaluative subscale shows a clearer conceptualization of status threat.