7-7:15 p.m.
The Effect of Background Music in Native and Foreign Language on Working Memory
Lauren Fox
Faculty Advisor: Lonnie Yandell, Ph.D.

Previous research has shown music and speech are disruptive to the phonological loop of working memory, even when the speech is in a foreign language (Alley & Greene, 2008; Jones & Macken, 1993; Meinhardt-Injac et al., 2015; Salamé & Baddeley, 1989). Familiarity with music or level of meaningfulness of lyrics can negatively impact working memory as well (Oswald, Tremblay, & Jones, 2000). The present study seeks to add to the understanding of vocal music effects in both English language and foreign language on working memory. Participants included 45 male and female undergraduate Belmont University students who were randomly assigned to either a familiar or unfamiliar song condition. They listened to a song in three versions (instrumental, vocal with English lyrics, and vocal with German lyrics) while completing three trials of a digit span task that was modeled after Alley and Greene (2008). The results are expected to show that vocal music is more disruptive to working memory than instrumental music; additionally, the music with English lyrics from the familiar song condition will cause the most distraction to working memory. This study will lead to a better understanding of how music and language affect working memory.

7:15-7:30 p.m.
Black Cats and Broken Mirrors: The Effects of Tolerance of Ambiguity and Perceived Control on Superstitious Thinking
Lauren Fox, Kathryn Graeff, Candace Hearn, Marie Holzer & Jasmine Niazi
Faculty Advisor: Pete Giordano, Ph.D.

Previous research has examined the effects of tolerance of ambiguity and perceived control on superstitious thinking within individuals. (Keinan, 1994; 2002). Some individuals believe superstitions have an effect on their decision-making and daily lives (Wiseman & Watt, 2004). Tolerance of ambiguity is how people view uncertain situations or ideas; low tolerance of ambiguity can cause one to view ambiguity as “threatening” or feel discomfort because of it (Budner, 1962; Norton, 1975). The concept of superstitious thinking has been linked to perceived control in which individuals reflect on their levels of control and believe that there is a perceived illusory connection between two separate events – this would increase superstitious perceptions (Whitson & Galinsky, 2008). The present study examined the effects of tolerance of
ambiguity and perceived control on superstitious thinking. Participants were 45 undergraduate students at Belmont University. After completing a measure of tolerance of ambiguity, participants were randomly assigned to one of two groups: low perceived control and high perceived control. For the manipulation of perceived control, we used the Wisconsin Card Sorting Task and provided instructions on how to complete the task. The participants in the low perceived control group were given very little instructions on how to complete the task, whereas the participants in the high perceived control group were given detailed instructions (i.e., sort cards by shape or color). Participants then completed a measure of superstitious thinking. We predicted that individuals with a low tolerance of ambiguity and low perceived control would exhibit the highest superstitious thinking, as compared to individuals with a high tolerance of ambiguity and high perceived control.

7:30-7:45 p.m.
**The Effects of Emotion and Race on Visual Search Tasks in Crowds**
Christina Sorentino, Kyle McLean & Rose Lang
Faculty Advisor: Lonnie Yandell, Ph.D.

According to Becker, Neel, and Anderson (2010), illusory conjunctions occur when the features of one stimulus are mistaken for the features of an adjacent stimulus. Considering the significant impact illusory conjunctions can have on an individual’s perceptual experience, we were interested in learning more about how they affect people’s perception of emotion. We were particularly interested in how illusory conjunctions influence the perception of emotion in relation to race. Becker and colleagues (2010) discovered that when presented with a neutral black male face and an angry white male face, participants were more likely to perceive the black face as angry. The flow of anger to the black man’s face without any bias to see them as angry suggests that non-random illusory conjunctions follow stereotypic expectations. The present research aimed to address how race affects the perception of anger in a crowd.

Participants in our study included approximately 3 male and 14 female Belmont University students recruited from introductory psychology courses. Participants completed a visual search task with 18 trials consisting of a 3x3 grid of neutral and angry faces. In each trial, participants selected one of the two possible angry faces, which were either a white male or white female face or a black male or black female face, and had their eye movements recorded using eye tracking equipment. We expect that when presented with both angry white face and an angry
black face, the participant will be more likely to select the angry black face. This research can make us more aware of how stereotypes influence perception in our daily lives.

7:45-8 p.m.
**What Does It Feel Like? An Investigation of Emotional and Physiological Responses to Tactile Perception**
Araceli Garland, Ashton Judy, Jasmine Niazi, Alyssa Tidwell & Melissa Wolf
Faculty Advisor: William Bailey, Ph.D.

The senses play an enormous role in our ability to experience the world physically and emotionally. Though a great deal of research exists aimed at understanding visual and auditory reactions to stimuli, less is known about the specific role that tactile stimulation plays on human physiology and mood. The present study sought to understand how various textures elicit emotional and physiological responses when participants are actively or passively exposed to them. Approximately 45 undergraduate, introductory psychology students’ baseline blood pressure and heart rate was measured using the omron biopac model HEM-711DLX. Baseline mood was also recorded with the Brief Mood Intensity Scale (BMIS) survey (Mayer & Gaschke, 1988). Finally, participants were randomly assigned into one of two groups, active or passive, before being asked to feel three different textures. It was hypothesized that individuals will experience an increase in blood pressure and heart rate as well as negative emotions when actively or passively exposed to rough textures. Conversely, we predicted a decrease in blood pressure and heart rate and positive emotions in participants who are actively or passively exposed to smooth textures. Because previous research reports differences in perception between active and passive touch, we also sought to determine differences between these two conditions.

8-8:15 p.m.
**The Effects of Mindfulness Training and Empathy on Schadenfreude**
Ashton Judy, Araceli Garland, Melissa Wolf, Rose Lang, Alyssa Tidwell & Amanda Conway
Schadenfreude, or pleasure at another’s misfortune (a characteristic generally interpreted as not socially desirable), is a relatively foreign concept to the average person, but can give hints as to how people deal with vengeance, empathy, deservingness, and dispositional anger (Cikara & Fiske, 2012; Feather, Wenzel, & McKee 2013; Sawada & Hyama, 2012; van Dijk, 2009). Previous research suggests that mindfulness may reduce negative thoughts (Kilken & Shook, 2014). In addition, mindfulness appears to be negatively related to rumination and anger (Borders, Earleywine, & Jajoda 2010). The present study aimed to determine whether trait empathy, as well as a mindfulness induction, would have an impact on an individual’s trait schadenfreude. Approximately 45 undergraduate, introductory psychology students’ empathy and social desirability scores were gathered. Then participants were randomly assigned to either a mindfulness or mind wandering condition (Levine, Mar, McKinnon & Spreng, 2009, Crowne & Marlowe, 1960). Finally, participants filled out two schadenfreude scales (Gumico, Fernandez, Pollard, Sorentino & West, 2015, Hoogland 2015). It was hypothesized that individuals who are high in trait empathy and who experienced a mindfulness induction will report lower schadenfreude, as compared to individuals who are low in trait empathy and who experienced a mind wandering induction. Additionally, we predicted a negative relationship between schadenfreude and social desirability.

8:15-8:30 p.m.

**Becoming Older: Examining the Reduction of Perceived Anger in Older Adults**

Emily Boyd, Amanda Conway, Ashton Judy & Caroline Moore

Faculty Advisor: Lonnie Yandell, Ph.D.

Growing older is an aspect of life that everyone must come to terms with. Previous research has shown that ageism is threatening to older populations but that perspective taking may combat negative stereotypes associated with age (Raynor, 2015, Galinsky & Moskowitz, 2000). Research has also shown differences with emotional perception associated with ageism (Hass et al., 2015). Our study aims to extend this line of research by examining the effects of one’s perspective taking, thinking about what you would be like at 75 years old, on perceiving emotions and the intensity of these emotions in old and young faces. Thirty undergraduate participants were randomly assigned to a perspective taking condition or a non-perspective taking condition. Participants took an age perception test that consisted of 48 faces for 100 ms with 15 seconds in between each facial expression, correct recognition of the emotion and the intensity of the emotion was measured. We hypothesize individuals who took on the perspective
of an older version of themselves would be better at detecting emotion in older adults than those who do not take the old age perspective. This will be demonstrated by the correct perception of emotion at a lower intensity. Further, we also hypothesize that there will be a larger difference in the perception of emotion between younger and older individuals when there is no perspective taking. This study will help us understand our perception of age and emotion in hopes to combat negative stereotypes.

8:30-8:45 p.m.
The Effect of Power Music and Neuroticism on Academic Self-Efficacy
Ragan Clark, Shelby Willard, Seth Strobel, Kyle McLean & Caroline Moore
Faculty Advisor: Pete Giordano, Ph.D.

Previous research has shown that music can increase athletic performance, decrease stress, and increase self-efficacy with those high in neuroticism. Furthermore, music can be linked to academic performance. Listening to bass heavy music or power music has been shown to increase people’s ‘sense of power’ on several tasks such as illusion of control tasks, abstract thinking, and increase an individual's competitiveness (Hsu et al., 2014). The present study investigated whether increased self-efficacy, through the use of power music, would increase academic performance. Participants included 45 Belmont University students who were randomly assigned to two groups: one listened to power music before an academic task and a control group that did not receive any music before the academic task. Both groups of participants took a test to measure levels of neuroticism using The Big Five Personality Test (Goldberg, 1992), then listened to power music or no music, and then completed an ACT reading passage and sample question, then evaluated their self-efficacy for an academic task using the Self-Efficacy for Learning Form. We expect our results to show that those high in neuroticism and exposed to power music before an academic task will have the highest academic self-efficacy, as compared to those low in neuroticism or not exposed to music. This study will lead to a better understanding of how music and neuroticism can affect academic self-efficacy.