Centennial Honors College Thomas E. Helm Undergraduate Research Day 2024

ABSTRACT

Major: Psychology

Poster

Faculty Mentor(s): Jonathan Hammersley

Attentional Habituation: Examining Motives for Caffeine Use, Mood State, and Anxiety Sensitivity in Negative Emotional Stroop Task Performance

Mitchell White

Cole Turner

Kelly Chen

The Stroop task was created by John Stroop (1937) to measure distractibility by naming word colors while ignoring word meaning. Mood and personality factors like anxiety, fear, depression, and drug cravings can influence Stroop task performance. However, little research has been done on the influences of factors like caffeine use motives, anxiety sensitivity, and current mood state (e.g. anger or curiosity). This study investigates the relationship between negative-emotional Stroop task performance and caffeine use motives, mood state, and anxiety sensitivity. We predicted that individuals who have higher anxiety sensitivity or negative mood would have more difficulty naming the colors of negative emotional words on the Stroop Task, and therefore, take longer to complete the task. 114 participants completed a computerized Stroop task and personality and mood questionnaires such as the Anxiety Sensitivity Index. Caffeine Motives Questionnaire, State-Trait Personality Inventory, and Big Five Inventory. Data was analyzed with Pearson bivariate correlational analyses, linking state mood, traits, and Stroop Task performance. Mood state or traits were not associated with Stroop performance. Caffeine use was associated with better performance, but only on only the first page of negative-emotion words. Using caffeine specifically to reduce stress or negative emotions, and Cognitive Concerns of anxiety sensitivity, were also significantly associated with the first page of Stroop words, but not the second. Thus, there is evidence of habituation (diminishing effects with repetition) on negative Stroop words, as also demonstrated by previous research (Ben-Haim & Mama, 2011). Implications and future research ideas will be discussed.