EXPLORING THE INFLUENCE OF NEUROTICISM AND EXTRAVERSION IN EMOTIONAL INDUCED BLINK PARADIGM

Stephanie Menjivar Quijano (she/her/hers) is currently a third year graduate student for the Research and Experimental (ReX) M.A. program from our Psychology Department. Since 2013, Stephanie has worked with various faculty members from both her undergraduate institution, CSU East Bay, and here at SJSU when she joined the M.A. program in 2018. Some of these projects include research involving navigational learning in both humans and rodents, accessing coping mechanisms in university student, assisting Dr. Feria's ongoing research on multiple object tracking (MOT), and Dr. Carr's continued research on the effects of caffeine and memory in young adults. Stephanie hopes to pursue further training in Social Personality Psychology where she intends to implement Neuroscience techniques and other research techniques she's learned along the way during her Ph.D.

4/29 AT 11 AM ON ZOOM: https://sjsu.zoom.us/j/88144764534

EMOTIONAL STIMULI HAVE AN ADVANTAGE OVER NEUTRAL STIMULI WHEN COMPETING FOR COGNITIVE RESOURCES (PESSOA, KASTNER, & UNGERLEIDEN, 2002). SUCH THAT NEUTRAL STIMULI MAY GO UNNOTICED WHEN EXPERIENCED IN THE SAME CONTEXT AS, OR WHEN CLOSELY FOLLOWING, EMOTIONAL STIMULI. RESEARCHERS HAVE RECENTLY BEGUN EXPLORING FACTORS THAT INFLUENCE SUCH EMOTION INDUCED BLINDNESS USING THE EMOTIONAL ATTENTIONAL BLINK (EAB; MOST ET AL, 2005) TASK. THE EAB TASK IS A UNIQUE MEASURE THAT ROBUSTLY MEASURES THE SHORTFALLS OF ATTENTION WHEN WE ARE PRESENTED WITH EMOTIONALLY CHARGED STIMULI. IN A TYPICAL EAB TASK, A RAPID SEQUENCE OF COLORED ARCHITECTURAL OR LANDSCAPE PICTURES IS PRESENTED. INSIDE THE SEQUENCE, AN EMOTIONALLY CHARGED DISTRACTOR PICTURE IS PRESENTED BEFORE A LEFT OR RIGHT ROTATED TARGET PICTURE. RESEARCHERS HAVE FOUND THAT AN OVERALL REDUCTION IN PERCENT ACCURACY FOR DETECTING THE CORRECT ROTATION OF THE TARGET PICTURE CAN BE OBSERVED APPROXIMATELY 200MS AFTER THE PRESENTATION OF THE CRITICAL DISTRACTOR PICTURE (MOST ET AL, 2005). HERE, WE ASK WHETHER DIFFERENCES IN PERSONALITY TRAITS MAY INFLUENCE EAB TASK PERFORMANCE. THIS RESEARCH IS MOTIVATED BY PAST RESEARCH SHOWING A ROBUST RELATIONSHIP BETWEEN NEUROTICISM WITH NEGATIVE AFFECT (COSTA & MCCRAE, 1980; ORMEL ET AL, 2001), AND EXTRAVERSION WITH POSITIVE AFFECT (COSTA & MCCRAE, 1980; FLEESON ET AL, 2002), AND HOW THESE RELATIONSHIPS MAY INFLUENCE VISUAL ATTENTION (SZYHURA AND NOCKA, 1958; BREDEMIEIER ET AL, 2011; MACLEAN & ARNELL, 2010). YET, A POTENTIAL LINK BETWEEN PERSONALITY DIMENSIONS AND EMOTION INDUCED BLINDNESS FOR NEUTRAL INFORMATION REMAINS POORLY UNDERSTOOD. MOTIVATED BY THESE FINDINGS, WE AIM TO EXPLOR THE RELATIONSHIP BETWEEN PERSONALITY DIMENSIONS AND PERFORMANCE ON THE EAB TASK. WE PLAN TO INVESTIGATE WHETHER LEVELS OF NEUROTICISM AND EXTRAVERSION INFLUENCE THE STRENGTH OF THE EMOTIONAL ATTENTIONAL BLINK. WE HYPOTHEZIZE THAT INDIVIDUALS WITH HIGH LEVELS OF NEUROTICISM WILL PERFORM MORE POORLY ON THE EAB TASK THAN THOSE WITH LOW LEVELS WHEN PRESENTED WITH NEGATIVE CRITICAL DISTRACTORS. LIKewise, WE PREDICT THAT INDIVIDUALS WITH HIGH LEVELS OF EXTRAVERSION WILL PERFORM MORE POORLY THAN THOSE WITH LOW LEVELS WHEN PRESENTED WITH A POSITIVE CRITICAL DISTRACTOR. THESE RESULTS MAY IMPLY THAT THE STRENGTH OF EMOTION INDUCED BLINDNESS MAY BE ADDITIONALLY DEPENDENT UPON THE LEVELS OF PERSONALITY DIMENSIONS.