An investigation of attention biases to emotional faces in individuals with ADHD
Osly D. Galobardi
Advisor: Sara M. Levens
University of North Carolina at Charlotte

Abstract

Individuals with Attention Deficit Hyperactivity Disorder (ADHD) experience difficulty concentrating on goal-oriented tasks and adapting to changing environments. While much research on ADHD has focused on emotion processing and attention deficits as independent factors underlying ADHD behaviors, less research has investigated the interaction between emotion processing and attention deficits. The present studies aimed to examine attention capture biases in response to emotional stimuli in adolescents with ADHD. Individuals with ADHD and matched controls completed an affective priming task where happy, sad, angry, disgust and neutral facial expressions were presented first as Primes (for 500ms) and then as Targets. Reaction time (RT) to identify the target’s valence (positive or negative) was assessed as a function of the primes. A priming score was calculated by measuring the RT to the target face as a function of whether the prime was a neutral or target-congruent facial expression. In Study One, individuals who self-disclosed a diagnosis of ADHD showed greater attention capture for angry and happy expressions (approach emotions), though marginally less attention capture for disgusted expressions (withdrawal emotion). Results from Study One suggest that individuals with ADHD may exhibit a dysregulation in approach-avoidance attention mechanisms. In Study Two, individuals who met criteria for child ADHD and/or current diagnosis of ADHD demonstrated greater attention capture for disgusted emotional expressions and less attention capture for angry emotional expressions. Inconsistent findings suggest different emotion processing patterns as individuals with ADHD develop into adulthood depending on the level of maturity.