

Associations between Social Anxiety Severity and Visual Attention Towards Eye Regions of Emotional Faces: Insights from Eye-Tracking



Nicole N. Capriola-Hall¹, Thomas H. Ollendick², & Susan W. White¹

¹Center for Youth Development and Intervention, University of Alabama

²Child Study Center, Virginia Tech



INTRODUCTION

- Social anxiety disorder (SAD) may be related to avoidance of emotionally threatening stimuli.
- Eye-tracking research has yet to explicitly focus on differences in attention allocation to the eye region of emotional faces among adolescents with SAD relative to a control group.
- We sought to determine whether youth with SAD relative to controls demonstrated avoidance to the eye region of angry faces.

METHOD

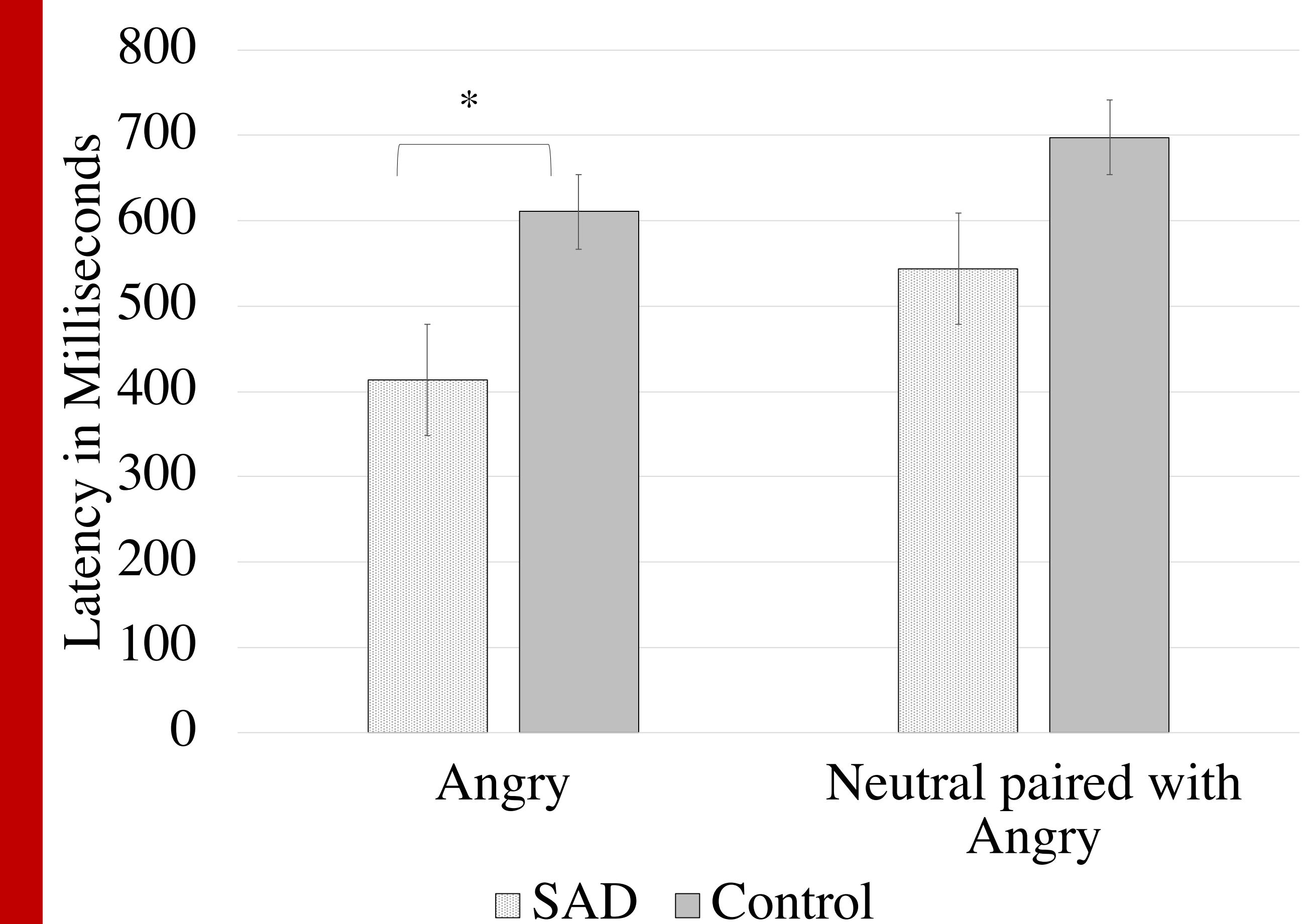
- Pre-treatment data from two groups: a clinical sample of adolescents with SAD ($n = 28$, M age = 14.07 years) from a randomized controlled trial of a computerized treatment to reduce social anxiety symptoms and a control sample ($n = 25$, M age = 13.56 years).
- Social anxiety symptoms were assessed using the Screen for Child Anxiety Related Emotional Disorders (self-report).
- Eye-tracking data was collected using Tobii X60.
- The eye-tracking stimuli were from the NIMH Child Emotional Faces Picture Set consisting of teen faces.

Visual Attention to the Eye Region of Angry Faces is Associated with Social Anxiety



RESULTS

- Adolescents first fixated on the eye region of angry faces more quickly than the paired neutral eye region, $t = 2.769$, $p = .008$, $d = 0.429$.
- Adolescents with SAD demonstrated shorter latencies to fixate on the eye region of angry faces compared with adolescents without SAD
- No significant group level differences emerged for latency to fixate on neutral faces when paired with angry faces.



DISCUSSION

- There is evidence for SAD specific differences in attention allocation to the eye region of angry faces compared to youth without SAD.
- Overall, these findings suggest that the eye region represents a salient facial feature for adolescents with SAD since eye contact provides a signal of potential social evaluation.

This work was partially supported by the National Institute of Mental Health, Grant 5R34MH096915 [PI: Ollendick] and the Virginia Tech Graduate Research Development Program

Correspondence to: nncapriola@crimson.ua.edu