Fear Learning Predicts PTSD Symptoms in Children After Hurricane Florence

Allison Naudé, Laura Machlin, MA, & Margaret Sheridan, PhD

Posttraumatic stress disorder (PTSD) is a detrimental disorder that can cause a host of negative outcomes. Thus, it is important to be able to identify and predict its occurrence so that it can be prevented and treated effectively. A large body of research has examined PTSD in adults but almost no research has been conducted in young children. Atypical physiological responses to fear conditioning are associated with PTSD diagnoses, and one study found that physiological reactivity data collected before a traumatic event, the Boston Marathon Bombings, predicted PTSD symptoms (Busso, McLaughlin, & Sheridan, 2014). In addition, media exposure moderated this relationship. We hypothesized that atypical fear learning would predict PTSD symptoms following Hurricane Florence in a sample of young children, and that differential skin conductance response (SCR) collected during a fear learning paradigm prior to the hurricane would predict PTSD symptoms in children with significant exposure to the hurricane. We found that SCR to threat cues during fear learning predicted increased arousal PTSD symptoms and that child hurricane exposure predicted general PTSD symptoms following the disaster. We also found a marginally significant interaction between SCR to threat during fear learning and child hurricane exposure. Further research should be done to investigate the similarities between the fear learning-PTSD relationship in children and in adults.