

in response to emotional distractors ( $p < 0.005$ ,  $> 20$  voxels). Stratifying by diagnostic group revealed higher PSS related to greater regional activity in typically developing controls ( $p$ 's  $< 0.01$ ) while higher perceived stress related to lower regional activity in young adults with bipolar disorder ( $p$ 's  $< 0.01$ ).

**Conclusions:** Results from this preliminary study suggest a relation between greater perceived stress and decreased salience network regional activation in response to emotional distractors in young adults with bipolar disorder.

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**Keywords:** Salience Network, Bipolar Disorder, Perceived Stress, Brain Imaging, fMRI, Emotional Processing

### Peritraumatic Dissociation Affects Learning in Fear Conditioning

Vincent Rozalski<sup>1</sup>, Sabra Inslicht<sup>1</sup>,  
Alexandra Cowden Hindash<sup>1</sup>, and Thomas Neylan<sup>1</sup>

<sup>1</sup>UCSF and San Francisco VA Medical Center

**Background:** Peritraumatic dissociation (PD) differentially affects men and women's symptoms of posttraumatic stress. This study examines the association between PD and sympathetic nervous system reactivity via skin conductance in a fear-conditioning task.

**Methods:** Data were drawn from an experimental study of fear conditioning in trauma-exposed adults. Participants completed the Peritraumatic Dissociative Experiences Questionnaire (PDEQ). Participants were exposed to a mild shock (CS+ condition) or no shock (CS- condition) following a visual stimulus across several trials in an acquisition task. Two more tasks were administered a day later (extinction) and then a week later (retention) where the same stimuli were shown but no shocks were administered. Mixed level modeling was used to examine rate of change between groups.

**Results:** Participants ( $N=131$ , 56% women) were trauma-exposed civilians (65%) and military Veterans, and 77% met criteria for PTSD. No gender differences were observed in the PDEQ ( $t=-2.05$ ,  $p=.88$ ). During the acquisition task, individuals who were one standard deviation (SD) above the mean did not experience extinction across trials in response to the CS+ stimulus. During the retention task, individuals one SD below the mean did not experience extinction in response to the CS+ stimulus. All other groups experienced extinction for all other tasks. Gender differences were also observed in each task, with high and low dissociation differentially affecting extinction in each task and CS condition.

**Conclusions:** High peritraumatic dissociation hinders extinction to threatening stimuli, while low dissociation hinders long-term learning of safety. Furthermore, gender differences affect how dissociation affects learning in multifaceted ways.

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**Keywords:** PTSD - Posttraumatic Stress Disorder, Dissociative Effect, Skin Conductance Responses, Fear Conditioning and Extinction

### Peritraumatic Stress Symptoms Partially Mediate Pain Persistence After Sexual Assault

Andrew S. Tungate<sup>1</sup>, Kenneth A. Bollen<sup>2</sup>, Nicole A. Short<sup>1</sup>,  
Kristen D. Witkemper<sup>1</sup>, Megan Lechner<sup>3</sup>, Kathy Bell<sup>4</sup>,  
Jenny Black<sup>5</sup>, Jennie A. Buchanan<sup>6</sup>, Rhiannon Reese<sup>7</sup>,  
Gordon D. Reed<sup>8</sup>, Israel Liberzon<sup>9</sup>, Sheila A.M. Rauch<sup>10</sup>,  
Ronald Kessler<sup>11</sup>, and Samuel A. McLean<sup>1</sup>

<sup>1</sup>Institute for Trauma Recovery, University of North Carolina School of Medicine, Chapel Hill, NC, <sup>2</sup>University of North Carolina at Chapel Hill, <sup>3</sup>UCHealth Memorial Hospital, <sup>4</sup>Tulsa Forensic Nursing Services, Tulsa Police Department, <sup>5</sup>Austin SAFE, <sup>6</sup>Denver Health, <sup>7</sup>Crisis Center of Birmingham, <sup>8</sup>Christiana Care, <sup>9</sup>Texas A&M Health Science Center, <sup>10</sup>Emory University School of Medicine, <sup>11</sup>Harvard School of Medicine

**Background:** Increasing evidence suggests that chronic pain commonly develops after sexual assault (SA) and frequently occurs in body regions that do not experience trauma. To our knowledge, the influence of peritraumatic stress symptoms on pain persistence after SA has not been examined.

**Methods:** Adult women ( $n=706$ , mean age 29(10)) presenting for emergency care after SA were enrolled. Posttraumatic stress (PCL-5) and pain (0-10 scale) were assessed at one and six weeks. Using measurement models of pain, dysphoric arousal, re-experiencing, and avoidance, a structural equation model (SEM) was developed that modeled PTS symptoms mediating the transition from acute pain one week after SA to pain persistence at six weeks, controlling for age, ethnicity, childhood trauma (ACE), and trauma history (LEC).

**Results:** Among SA survivors with six week follow-up data (629/706(89%)), the above SEM provided a good fit to the data ( $\chi^2(103)=252.11$ ,  $p < .001$ ; RMSEA=.05; CFI=.97; TLI=.95, BIC=-422.95). In addition to the direct effect of one week on six week pain ( $\beta=.38$ ,  $p < .001$ ), the total indirect effect of PTS symptoms on pain severity six weeks after SA was observed ( $\beta=.06$ ,  $p=.01$ ). Among PTS symptoms, dysphoric arousal had the greatest effect on pain persistence ( $\beta=.09$ ,  $p=.018$ ).

**Conclusions:** Peritraumatic stress symptoms in the early aftermath of SA influence the transition from acute to persistent pain, particularly dysphoric arousal.

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**Keywords:** Pain, Acute Pain, Chronic Pain, Sexual Assault, PTSD - Posttraumatic Stress Disorder

### Physiological Correlates of Peritraumatic Dissociation: A Role for Past History of Trauma

Sarah Damiano<sup>1</sup>, Christine Larson<sup>1</sup>, Cecilia Hillard<sup>2</sup>, and Terri deRoon-Cassini<sup>2</sup>

<sup>1</sup>University of Wisconsin-Milwaukee, <sup>2</sup>Medical College of Wisconsin

**Background:** Peritraumatic dissociation (PD) is a known predictor for PTSD development, but its physiological correlates remain widely debated. This study investigated markers