

personality have a somewhat stronger tendency to generalize fear to safe or novel situations, which may explain mechanistically why these individuals are at higher risk for developing anxiety disorders.

2. Track: Biological & Medical

2-001

Scoping the Evidence for Learning Theories on PTSD in Veterans

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Background: About 5–13% of Dutch veterans experience PTSD after being deployed (Eekhout et al. 2016). Although effective treatments for PTSD are available, response rates are lower amongst veterans (Watts et al., 2013). Learning theories have been postulated to underlie PTSD (Lissek and van Meurs, 2015). Here, we investigate the empirical evidence from veterans with PTSD for these theories. If we reveal which learning mechanisms are specifically altered in veterans with PTSD, feasible lab-models can be studied and future clinical decision making can be directed accordingly. **Objective:** Creating a systematic overview of empirical (clinical) evidence for learning models for PTSD in veterans. **Method:** A systematic search was performed in PubMed. Original studies written in English were included investigating veterans with PTSD and a learning theory. Articles were screened by AF and AK independently. **Results:** In total, 2167 articles were screened and 101 met our inclusion on the following theories: Amygdala Kindling ($n = 30$), Reduced Fear Inhibition ($n = 17$), Resistance to Extinction ($n = 15$), Stress Sensitization ($n = 11$), Overgeneralization ($n = 7$), Failure to Habituate ($n = 5$), Hyper-Conditionability ($n = 3$), Associative Learning Deficits ($n = 3$), Incubation ($n = 1$), Two-Stage Learning ($n = 1$) and Failure to Inhibit Fear in the presence of safety cues ($n = 0$). **Conclusions:** Our systematic search shows evidence for Amygdala Kindling, Reduced Fear Inhibition, and Resistance to Extinction for veterans with PTSD. Other theories are less frequently investigated, revealing a research gap. The evidence supports that these mechanisms

can be investigated in lab-models to develop interventions.

2-002

Craving Moderates the Effects of Intranasal Oxytocin on Anger in Response to Social Stress among Veterans with Co-Occurring PTSD and Alcohol Use Disorder

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Background: Posttraumatic stress disorder (PTSD) and alcohol use disorder (AUD) commonly co-occur among US military veterans. Oxytocin holds promise for the treatment of both PTSD and AUD. However, the social salience hypothesis (Shamisay-Tsoory et al., 2016) posits that oxytocin may amplify an individual's pre-existing social inclinations rather than exclusively enhancing prosocial behaviour. Anger and aggression are well-established negative consequence of PTSD and AUD. **Objective:** We examined the moderating role of alcohol craving in the relation between oxytocin treatment and anger using the Trier Social Stress Task (TSST). **Method:** We used a randomized, double-blind, placebo-controlled design in a sample of male veterans ($N = 67$) with co-occurring PTSD and AUD. Participants self-administered oxytocin (40 IU) 45 minutes prior to the start of the TSST, then self-reported subjective alcohol craving and anger using a modified version of the Visual Analogue Scale (VAS) immediately following the TSST. Multiple regression analysis including main effects for group and baseline craving, and their interaction, was used to predict anger. Covariates included age, smoking, past 60-day alcohol use, PTSD symptom severity, self-reported aggression and baseline anger ratings. **Results:** A marginally significant interaction effect emerged ($\beta = -.71, p < .06$). Post-hoc probing indicated that higher baseline alcohol craving was associated with increases in anger for participants in the oxytocin group ($\beta = .50, p < .05$). Baseline craving was not associated with increases in anger in the placebo group. **Conclusions:** Findings suggest that future