

seeking behaviors. Additionally, female rats may be more sensitive to D2R manipulations on such risky decision-making behavior, highlighting the necessity of tracking sex-based differences in such tasks. Ongoing studies will determine whether D2R activity reveal a similar sex-specific change during such reward-seeking risk-preference. Furthermore, ongoing studies will determine the link of such behavior to effortful decision making and more traditional measures of risk-taking behavior, such as the Iowa Gambling Task used both in rodents and humans.

#### Categories:

Neuropsychiatry/Psychopharmacology

**Keyword 1:** decision-making

**Keyword 2:** psychopharmacology

**Correspondence:** Samantha M. Ayoub, University of California San Diego, sayoub@health.ucsd.edu

### 64 Reduced Generation of Specific Future Events in Veterans with PTSD

Caroline C Strang<sup>1</sup>, Ginette Lafleche<sup>1</sup>, Virginie Patt<sup>1</sup>, Jennifer J Vasterling<sup>1,2</sup>, Mieke Verfaellie<sup>1,2</sup>  
<sup>1</sup>VA Boston Healthcare System, Boston, MA, USA. <sup>2</sup>Boston University School of Medicine, Boston, MA, USA

**Objective:** When asked to imagine future events, individuals with PTSD provide narratives with limited event-specific details, suggesting an impairment in event elaboration. Here we examined whether future thinking in PTSD is also associated with an impairment in the initial stage of event construction, by using a future-event fluency task that makes no demands on event elaboration (MacLeod, A. K., & Salaminiou, E. (2001). Reduced positive future-thinking in depression: Cognitive and affective factors. *Cognition & Emotion*, 15(1), 99-107).

**Participants and Methods:** Thirty-five veterans (6 female, 29 male; aged 27-51), assigned on the basis of structured diagnostic interviews to PTSD-only ( $n = 15$ ), PTSD + depression ( $n = 9$ ), or psychopathology-free control groups ( $n = 11$ ), were asked to generate, in one minute, as many events as possible that they expected to happen in the future, across four conditions that varied in valence (positive, negative) and temporal framework (1 month, 10 years). Two

independent raters classified each event generated as being specific (i.e., a unique, time-limited event), generic (i.e., ongoing or recurring events), or a repetition.

**Results:** Results of linear mixed modeling carried out on the number of specific events generated showed that diagnostic group and event valence contributed significantly to the overall model fit. All participants generated more positive than negative events ( $\beta = 1.014$ ,  $SE = 0.330$ ,  $t(105) = 3.07$ ,  $p = 0.003$ ), and both PTSD groups generated fewer specific events than controls (PTSD-only ( $\beta = -2.203$ ,  $SE = 0.744$ ,  $t(35) = -2.96$ ,  $p = 0.005$ ); PTSD + depression ( $\beta = -1.859$ ,  $SE = 0.842$ ,  $t(35) = -2.21$ ,  $p = 0.034$ ). Adding the interaction between group and valence did not improve the model fit, suggesting that the PTSD groups were not differentially impaired in the generation of positive and negative events. When including scores on an emotionally neutral phonemic fluency task (FAS) as a covariate to account for verbal fluency, the PTSD-only group still generated significantly fewer events than the controls ( $\beta = -1.667$ ,  $SE = 0.733$ ,  $t(34) = -2.27$ ,  $p = 0.030$ ). After adjusting for FAS, the group effect was marginal for the PTSD + depression group ( $\beta = -1.600$ ,  $SE = 0.801$ ,  $t(34) = -2.00$ ,  $p = 0.054$ ).

**Conclusions:** These results suggest that the impairment in future thinking in PTSD concerns not only the elaboration of future events but also the processes involved in initial event specification, such as those involved in the search and selection of a specific event. Moreover, these findings highlight a distinction between the future thinking abnormalities in PTSD, characterized by reduced generation of both positive and negative future events, compared to depression, which has been associated with reduced generation of positive future events only (MacLeod & Salaminiou, 2001).

**Categories:** Psychiatric Disorders

**Keyword 1:** post-traumatic stress disorder

**Keyword 2:** fluency

**Keyword 3:** cognitive neuroscience

**Correspondence:** Caroline C Strang, VA Boston Healthcare System, Caroline.Strang@va.gov

### 65 The Impact of PTSD and Mild Cognitive Impairment on Resting State