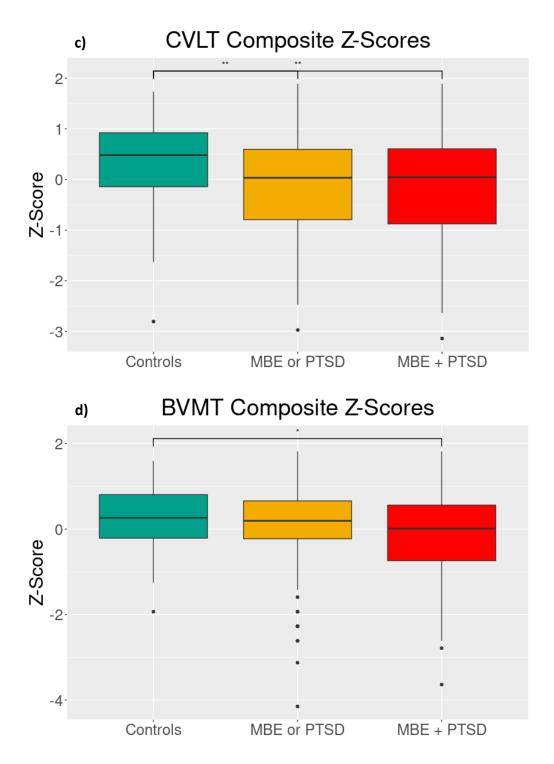


a) White matter skeleton for significant age interaction on diffusion parameters in which those with both a history of blast exposure and PTSD exhibited a more rapid cross-sectional age trajectory towards reduced white matter integrity than those without. Interaction remained significant after controlling for years of education, gender, and lifetime drinking history. Distinct regions of lower fractional anisotropy (red) and higher radial diffusivity (blue) such as the medial orbitofrontal cortex (circled).

*b)* Mean fractional anisotropy in the medial OFC is plotted by age and group in which we observe an inverse of the typical cross-sectional quadratic age trajectory in the blast-exposed with PTSD group (red).



Blast-exposed with PTSD group performed significantly worse globally on memory-targeted block assessments than other groups. Boxplots show z-score performance on the CVLT (c), a verbal memory block assessment, and the BVMT (d), a visuospatial memory test.