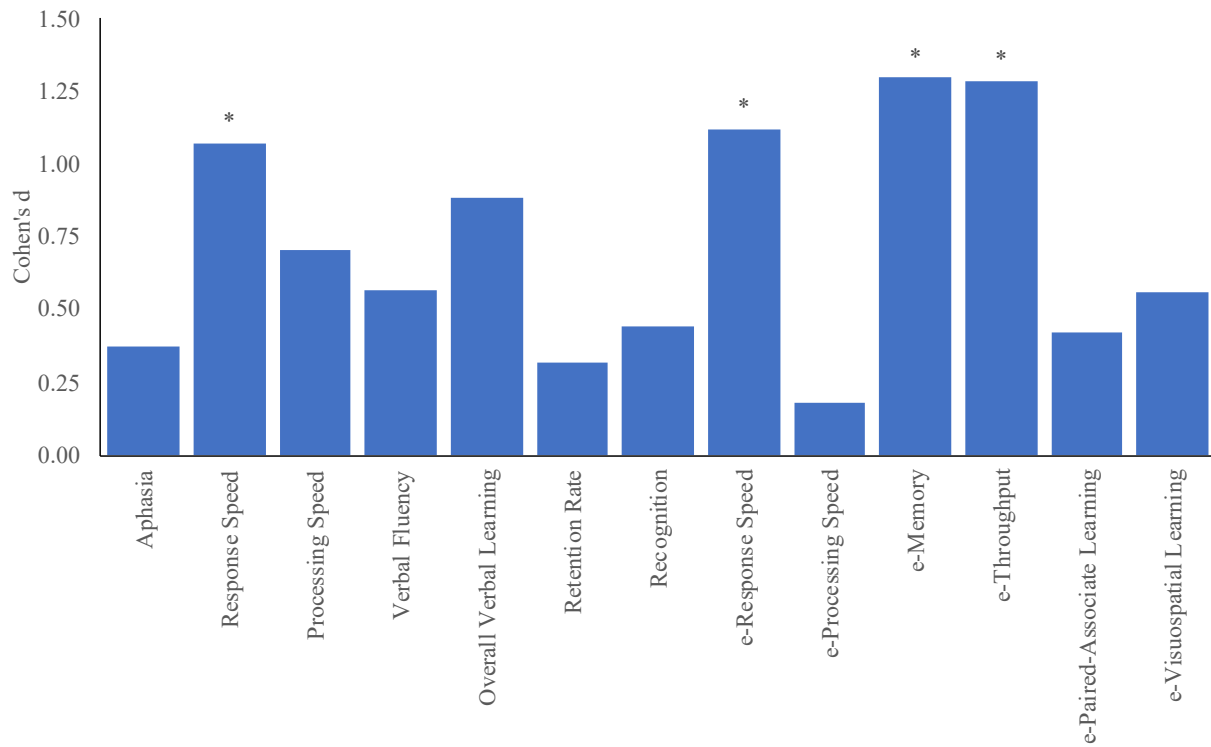


# Supplementary Material

## White Matter Connectivity in Incident Mild Cognitive Impairment: A Diffusion Spectrum Imaging Study of World Trade Center Responders at Midlife

**Supplementary Figure 1.** Decreases in domain specific cognitive function in responders with incident MCI versus cognitively unimpaired responders. A more negative Cohen's d value represents worse performance in the specified cognitive domain for responders with incident MCI. "e-" connotes measures collected on computerized tasks. \*Significant, uncorrected values defined by  $p < 0.05$ . None passed FDR = 0.05.



**Supplementary Table 1.** Generalized linear model (GLM) analysis using diffusion tensor image (DTI) and diffusion spectrum image (DSI) metrics comparing responders with incident mild cognitive impairment (MCI) versus cognitively unimpaired responders while controlling for age. DTI and DSI metrics are displayed with corresponding region of interest (ROI) showing only significant results for mean values in responders with incident MCI and cognitively unimpaired responders. Significant, uncorrected values are bolded and defined by  $p < 0.05$ .

<b>Metric/ROI</b>	<b>Incident MCI</b>	<b>Cognitively Unimpaired</b>	<b>p</b>
FA right rostral anterior cingulate	0.268	0.227	<b>0.001</b>
MD left rostral anterior cingulate	0.652	0.696	<b>0.035</b>
MD right caudal anterior cingulate	0.738	0.771	<b>0.028</b>
QA left parahippocampal	0.216	0.227	<b>0.043</b>
QA left amygdala	0.393	0.353	<b>0.024</b>

FA, fractional anisotropy; MD, mean diffusivity; QA, quantified anisotropy

