Supplemental Results

The group analysis of the BOLD data was performed on the change regression coefficients from individual subject analyses at post-scanning relative to baseline scanning. These change scores were examined with a 3 (emotion; negative, positive, neutral) x 3 (condition; congruent, incongruent, view) repeated measures Analysis of Covariance (ANCOVA) with PCL change score [post-pre] as a covariate. PCL change scores were mean centered before being entered into the ANCOVA. The AFNI 3dClustSim program using the –acf option was used to establish a p=0.05 corrected threshold (40 voxel clusters at p=0.005) for a whole-brain analysis. Due to its small size, bilateral amygdala Regions of Interest (ROIs) were interrogated using an anatomically defined mask (Eickhoff-Zilles Architectonic Atlas: 50% probability mask; Amunts et al., 2005). A small volume correction was established at an initial p value of 0.02 for the amygdala which yielded an extent threshold of 7 voxels. The SVCs for the remaining ROIs were established at an initial p value of 0.005 which yielded an extent threshold of 8 voxels (range k= 7.9 to 8.1). Post-hoc analyses were performed to facilitate interpretations. For these analyses, average percent signal change was measured across all voxels within each ROI generated from the functional masks, and data were analyzed using appropriate follow-up tests within SPSS.

ROI Analyses

Amygdala. A significant main effect of emotion was observed in left and right amygdala. In both regions, greater activation to negative relative to neutral [$t(20)$= 2.62 & 3.48, p<0.02] and positive relative to neutral stimuli [$t(20)$ = 3.58 & 4.14, p<0.01] were observed. Response to negative and positive stimuli did not significantly differ [$t(20)$ = 1.56 & 1.87, p>0.08]. No other significant effects or interactions were observed within amygdala.

Inferior parietal cortex. A significant main effect of task condition was observed in left inferior parietal cortex. Greater BOLD response was observed during congruent relative to view trials [$t(20)= 3.47$, $p<0.01$] and incongruent trials relative to view trials [$t(20)= 3.78$, $p<0.01$]. Response to congruent and incongruent trials did not significantly differ [$t(20)= .90$, $p>0.37$].

Whole Brain Analyses

Main Effect of Task Condition. A significant main effect of task condition was observed in regions including dorsomedial frontal cortex, left and right superior parietal/motor cortex, left inferior parietal cortex, and right middle insula cortex. In all regions, greater BOLD response was observed during congruent relative to view trials [$t(20)= 2.95$-3.93, $p<0.01$] and incongruent trials relative to view trials [$t(20)= 3.45$ & 4.95, $p<0.01$]. In all regions except dorsomedial frontal cortex, response to congruent and incongruent trials did not significantly differ [$t(20)= 0.59$-1.8, $p>0.08$]. In dorsomedial frontal cortex, greater activation was observed to incongruent relative to congruent trials [$t(20)= 2.47$, $p=0.02$].

No other significant effects or interactions were observed.

Supplemental Table 1: Brain Regions Showing Significant Main Effects of Emotion and Task Condition.

Region[a]	Coordinates of Peak Activation [b] Left/Right	BA	*x*	*y*	*z*	*F*	*p*	Voxels
Regions of Interest								
Main Effect of Emotion								
amygdala	Right		23.5	-2.5	-9.5	14.64	<0.0001	9
amygdala	Left		-18.5	-5.5	-9.5	12.25	<0.0001	15
Main Effect of Task Condition								
inferior parietal cortex	Left	40	-43.5	-19.5	20.5	11.59	0.0001	20
Whole Brain Analyses								
Main Effect of Task Condition								
dorsomedial frontal cortex	Right	6	7.5	-13.5	50.5	13.57	<0.0001	125
superior parietal/motor cortex	Left	4/7	-28.5	-16.5	47.5	21.09	<0.0001	212
superior parietal/motor cortex	Right	7	25.5	-46.5	56.5	17.19	<0.0001	435
inferior parietal cortex	Left	13	-46.5	-25.5	23.5	12.59	<0.0001	67
middle insula cortex	Right	13	37.5	-25.5	23.5	19.20	<0.0001	60
culmen	Left		-13.5	-40.5	-15.5	11.10	0.0006	48

[a] According to the Talairach Daemon Atlas (http://www.nitrc.org/projects/tal-daemon/).
[b] Based on the Tournoux & Talairach standard brain template, BA= Brodmann's Area
PCL= Posttraumatic Stress Disorder Checklist- Military Version

Supplemental Figure Legend

Supplemental Figure 1. PTSD Checklist Change Score-by-Emotion Interaction in Parietal Cortex in 21 Trauma-Exposed Combat Veterans.

Participants showing above average improvement in PTSD symptoms, relative to participants showing below average change, showed greater change in the difference between activation to negative relative to neutral stimuli and in positive relative to neutral stimuli.