TRAIT ANXIETY AND IMPOVERISHED PREFRONTAL CONTROL OF ATTENTION.

Sonia J Bishop

Supplementary Note

Supplementary Imaging Analyses

The theoretical perspective behind the hypothesis tested here – that trait anxiety is associated with impoverished active recruitment of prefrontal control mechanisms to govern the allocation of attention in response to processing competition when attentional resources are not fully occupied by the task at hand – conceives of a relationship between trait anxiety and PFC function that is independent of amygdala hyper-responsivity to threat. In order to investigate this a purely cognitive paradigm was used, in the absence of threat-related stimuli, and effects of anxiety upon amygdala activity as a function of experimental condition were not predicted. In line with this, small-volume corrected analyses using the MNI anatomical amygdala ROIs[1] indicated that there were no significant effects of trait or state anxiety upon amygdala activity either as a function of perceptual load and distractor congruency or across experimental conditions relative to baseline. In addition, whole brain voxel-wise analyses corrected for multiple comparisons indicated that no regions outside of our prefrontal ROIs showed significant interactions of trait or state anxiety with perceptual load, distractor congruency, or load by congruency (ps>.1 whole brain corrected).

Reference

1. Tzourio-Mazoyer, N. *et al.* Automated anatomical labeling of activations in SPM using a macroscopic anatomical parcellation of the MNI MRI single-subject brain. *Neuroimage* **15**, 273-289 (2002).