Enhanced Avoidance Habit Learning in Obsessive-Compulsive Disorder

Supplemental Information

Sensitivity Analyses

We conducted a series of sensitivity analyses to ascertain whether our primary results remained under the p < .05 significance threshold if certain individuals were excluded. Firstly, we tested if the exclusion of patients with particularly mild symptom severity, indexed by scores of less than 16 on the Yale-Brown Obsessive Compulsive Scale (1), affected responses to the devalued stimulus in the habit test. The results remained significant, with a stimulus-by-group interaction $(F_{(1.44)} = 6.297, p = .016)$, which was driven by greater responding to the devalued stimulus in obsessive-compulsive disorder (OCD) patients, $F_{(1,44)} = 7.812$, p = .008 and no difference in responding to the valued conditioned stimulus, F < 1. Obsessive-compulsive personality disorder (OCPD) traits were assessed using the Compulsive Personality Assessment Scale (CPAS). This scale has been used in several studies as a putative measure of OCPD severity (2), but there is no validated cut-off score. We therefore conducted a median split of scores on the CPAS and divided OCD patients into High and Low OCPD groups, to assess if patients high in OCPD symptoms drove our primary results. There were no differences in the number of habit responses performed in extinction between these groups, F < 1. Similarly, excluding patients in the upper quartile of CPAS scores did not influence the habitual responding [the stimulus-by-group interaction remained significant: $F_{(1,42)}$ = 5.972, p = .019].

Supplementary References

- Goodman WK, Price LH, Rasmussen SA, Mazure C, Fleischmann RL, Hill CL, *et al.* (1989): The Yale-Brown Obsessive-Compulsive Scale (Y-BOCS): Part 1 Development, use and reliability. *Arch Gen Psychiatry* 46:1006-1011.
- 2. Fineberg NA, Sharma P, Sivakumaran T, Sahakian B, Chamberlain S (2007): Does obsessivecompulsive personality disorder belong within the obsessive-compulsive spectrum? *CNS Spectrums* 12:467-82.