

Neurocognitive domain	Definition	Task	Neural system	Neurochemistry
Contingency-related cognitive flexibility	Impaired adaptation of behaviour after negative feedback	Probabilistic reversal-learning tasks	OFC, parietal cortex and subcortical connections	Serotonin
Task/attentional set-shifting	Impaired switching of attention between stimuli	Extra-dimensional attentional set-shifting (CANTAB)	Ventrolateral PFC and subcortical connections ²⁶²	Dopamine
Attentional bias/disengagement	Impaired shifting of mental sets away from disorder-relevant stimuli	Attentional bias/disengagement tasks e.g. Dot-Probe, Stroop, Affective Go/No Go (CANTAB)	Frontal and subcortical regions	Emotion-dependent attentional bias/disengagement: serotonin ²⁶³
Habit learning	Lack of sensitivity to goals or outcomes of actions	Habit formation tasks testing appetitive or avoidance habit - learning	Fronto-striatal circuits; Habit activity involves connections between premotor cortex and posterior putamen ; Goal-directed activity involves connections between VMPFC and caudate	Dopamine

Table 2 - Subdividing Compulsivity: Abbreviated Summary of Neurocognitive Domains, Tasks, Neural and Neurochemical Correlates.

OFC = Orbitofrontal cortex; PFC = Prefrontal cortex VMPFC = ventromedial prefrontal cortex; CANTAB = Cambridge Neuropsychological Test Automated Battery