

S7 Table. WAIC values in the supplementary model comparison.

Group	Best-fitted RL	RL1 _{common}	RL2 _{common}	RL3 _{common}	RL _{motor-perseveration}
HC	4178.4	4396.9	4275.5	4277.6	4369.3
OCD	3387.4	3642.0	3496.2	3509.0	3656.0
PG	2160.1	2250.5	2190.1	2171.5	2226.2

WAIC, widely applicable Akaike information criterion; HC, healthy control; OCD, obsessive-compulsive disorder; PG, pathological gambling; Best-fitted RL, RL2 in reward trials and RL3 in avoidance trials; RL1_{common}, RL1 that has a common set of parameters across the reward and the avoidance trials; RL2_{common}, RL2 that has a common set of parameters across the reward and the avoidance trials; RL3_{common}, RL3 that has a common set of parameters across the reward and the avoidance trials. RL_{motor-perseveration}, RL with motor-perseveration.