

		GAINS		LOSSES	
		mean	sem	mean	sem
AIC	Off drug	35.58	0.59	36.58	0.72
	Placebo	35.82	0.63	36.23	0.64
	On drug	36.32	0.13	36.95	0.18
BIC	Off drug	38.51	0.59	39.51	0.72
	Placebo	38.75	0.63	39.16	0.64
	On drug	39.25	0.13	39.88	0.18
pseudoR2	Off drug	0.29	0.01	0.27	0.02
	Placebo	0.28	0.01	0.27	0.01
	On drug	0.27	0.00	0.26	0.00
LLE model	Off drug	-15.79	0.30	-16.29	0.36
	Placebo	-15.91	0.32	-16.11	0.32
	On drug	-16.16	0.07	-16.48	0.09
LLE ratio	Off drug	12.78	0.59	11.78	0.72
	Placebo	12.54	0.63	12.14	0.64
	On drug	12.04	0.13	11.41	0.18
Learning rate (α)	Off drug	0.32	0.05	0.28	0.07
	Placebo	0.19	0.03	0.33	0.04
	On drug	0.25	0.04	0.40	0.06
Inverse temperature (β)	Off drug	8.16	1.55	2.34	0.57
	Placebo	8.84	1.63	4.74	1.02
	On drug	12.29	1.91	4.06	0.84

AIC = Aikaie Information Criterion, BIC = Bayesian Information Criterion, LLE = maximum logarithmic likelihood of choices under the RL model, LLE ratio = likelihood ratio test.

Supplementary Table 1.

Quantification of reinforcement model fits and model parameters.

	Off drug		Placebo		On drug	
	mean	sem	mean	sem	mean	sem
Anxiety	35.0	2.4	33.4	1.5	33.4	2.3
Digit span	6.6	0.3	7.1	0.3	6.9	0.3
Digit span	4.5	0.3	5.1	0.4	4.9	0.3
Apathy	8.8	1.4	9.5	1.2	8.9	1.3
UPDRS III	17.3	2.3	17.3	2.0	12.7	1.9
Expectancy	33.1	8.0	53.9	8.9	55.3	7.6

Supplementary Table 2

Clinical and neuropsychological measures across treatments.