Study	N(Drug, Pla)	Drug, dose	SMD [95% CI]	Decrease punishment learning/sensitivity	Increase punishment learning/sensitivity
Jocham, 2011[55]	16	Amisulpride 200mg	0.08 [−0.77, 0.92]		
Admon, 2017[56]	20, 18	Amisulpride 50mg	0.54 [−0.11, 1.19]		
Frank, 2006[57]	19, 20	Haloperidol 2mg	−0.38 [−1.01, 0.25]		
Walsh, 2018[58]	20, 20	Bupropion 150mg	0.37 [−0.25, 1.00]		
Bernacer, 2013[59]	17, 17	Methamphetamine 0.3mg/kg	−0.01 [−0.68, 0.66]		
Bellebaum, 2017[63]	16, 20	Modafinil 200mg	−0.52 [−1.19, 0.14]		
Pessiglione, 2006[64]	13, 13	L−dopa 100mg+25mg	0.42 [−0.35, 1.20]		
Halahakoon, 2024[68]	21, 19	Pramipexole 1mg/day	−0.63 [−1.27, 0.00]		
Jocham, 2014[69]	22	Amisulpride 400mg	0.58 [0.07, 1.08]		
Murray, 2019[71]	18, 18	Amisulpride 400mg	−0.51 [−1.17, 0.16]		
Eisenegger, 2014[76]	41, 35	Sulpiride 800mg	0.22 [−0.23, 0.67]		
Cox, 2015[78]	10	Phe / Tyr depletion 100g	−0.91 [−1.95, 0.13]		
Kelm, 2015[80]	16	Phe / Tyr depletion 68.7g	−0.22 [−0.78, 0.33]		
Random−effects meta−analysis:			−0.04 [−0.29, 0.22]		

−2   −1   0   1   2

SMD (95% CI)