

**S7 Table.** *Correlations between learning performances and signed KL divergence ( $D_{KL}$ ).*

	Healthy controls		mPFC lesions		Lesion controls	
	Impulsive	Patient	Impulsive	Patient	Impulsive	Patient
$r_s$	$r_{s(67)} = 0.03$ [-0.21 0.26]	$r_{s(61)} = 0.06$ [-0.19 0.30]	$r_{s(29)} = 0.17$ [-0.20 0.49]	$r_{s(26)} = 0.28$ [-0.11 0.59]	$r_{s(15)} = 0.13$ [-0.37 0.58]	$r_{s(14)} = -0.11$ [-0.57 0.41]
$p$	0.830	0.639	0.374	0.151	0.610	0.695
$p$ (FDR)	0.830	0.830	0.830	0.830	0.830	0.830
$BF_{01}$	7.09	4.68	2.58	1.83	3.30	3.25

Note.  $r_{s(df)}$ : Spearman's Rho correlation coefficients (degrees of freedom); 95% confidence intervals are indicated in square brackets.  $p$ :  $p$ -values of correlations;  $p$  (FDR): false discovery rate (FDR)-corrected  $p$ -values.  $BF_{01}$  indicates the strength of evidence with Bayes factors contrasting the null hypothesis against the alternative hypothesis.