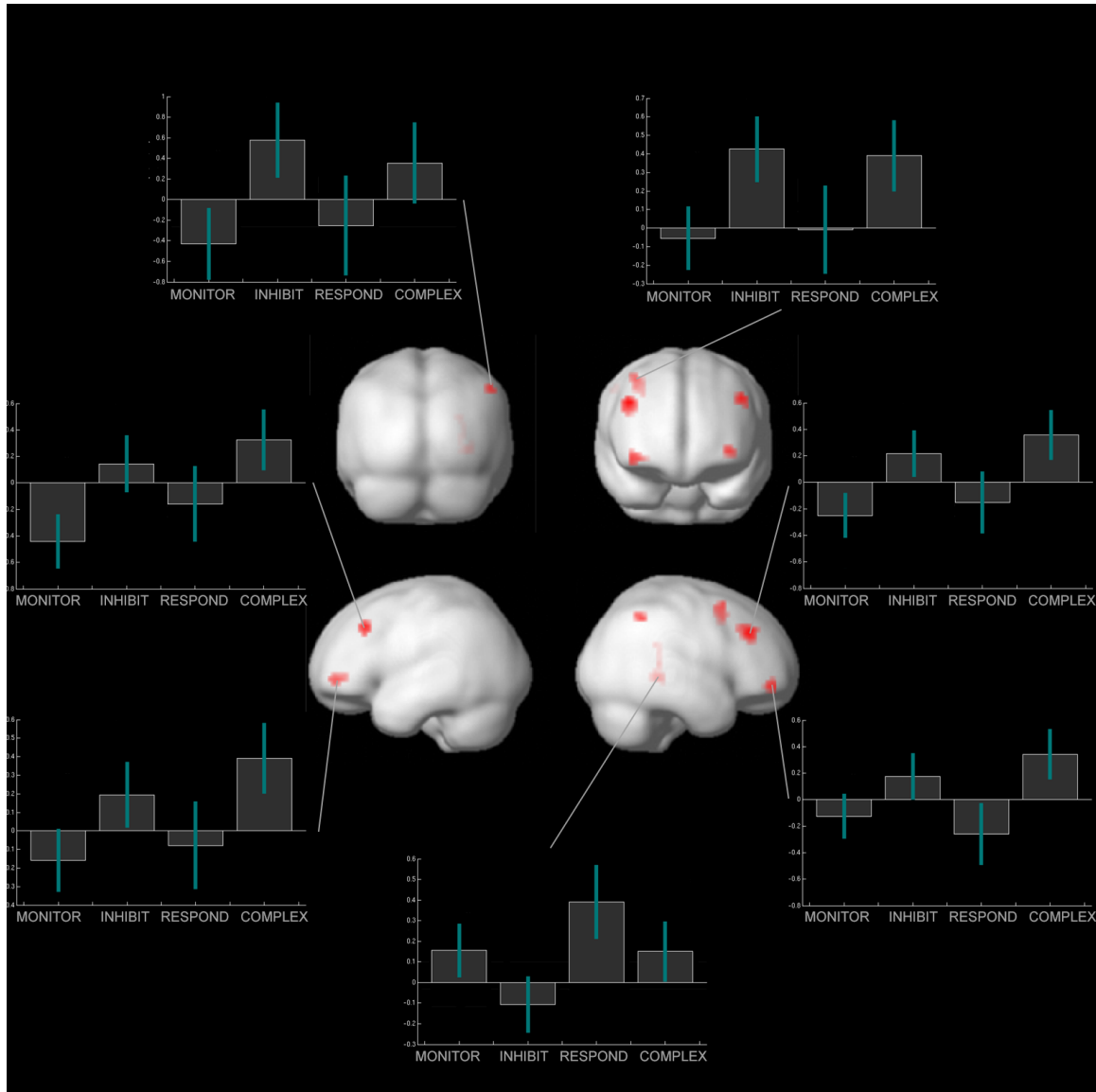


Supplementary Figure 1 – Voxelwise whole brain analysis of RIAFO seeded PPI



There was no significant main effect of task at the whole brain corrected threshold of $p < 0.05$ FDR corrected. Several clusters were evident at the liberal uncorrected threshold of $p < 0.01$ one-tailed. However, none of the regions showed heightened PPI for the INHIBITION task specifically, with similar effects evident for the COMPLEX task. Error bars represent the 90% confidence interval. F test with $N = 16$ participants and 4 conditions (task).

Supplementary Table 1 – Activation coordinates for ICA seed analysis

ROI Seed	Regions	Peak MNI Coordinates			
		x	y	z	t
C1	Left aLOFC	-39	54	-12	12.79
C2	Left AIFO	-30	24	3	19.46
	ACC/preSMA	6	9	51	9.26
C3	Left Superior Frontal Sulcus	-27	36	30	20.47
	Left Putamen	-24	-15	6	9.80
	Right Putamen	30	-6	9	8.80
	Supplemental Motor Area	-3	-3	51	11.49
	Left Middle Frontal Gyrus	-42	18	45	11.67
	Right Middle Frontal Gyrus	42	24	45	8.53
C4	Left pLOFC	-48	24	-3	11.83
	Superior Frontal Gyrus	6	57	24	6.87
	Left Middle Temporal Gyrus	-54	-3	-15	7.82
	Right Middle Temporal Gyrus	51	-6	-18	6.38
	Left Angular Gyrus	-57	-57	21	7.30
	Right Angular Gyrus	57	-51	21	6.35
C5	Left Lateral Frontal Pole	-36	51	-3	7.96
C6	Rostrolateral Frontal Cortex	-42	45	15	6.22
	Right Supramarginal Gyrus	57	-39	48	6.81
C7	Left IFS	-45	30	15	12.98
	Left Parietal Cortex	-33	-63	45	6.43
	Right Parietal Cortex	33	-69	36	6.17

N =16 participants with 1 condition (averaged across task)

Supplementary Table 2 – ROI results from PPI analysis

a) Positive effect of condition

ROI	t	p(one tailed)
Left STN	3.160	0.001
Right STN	2.590	0.006
SMC1	2.250	0.014
SMC2	1.800	0.039
SMC3	3.090	0.002

b) Main effect of task

ROI	F	p
Left STN	0.500	0.687
Right STN	1.210	0.316
SMC1	0.660	0.583
SMC2	0.190	0.906
SMC3	0.300	0.824

N =16 participants with 4 conditions (task)

Supplementary Table 3 - correlations with SSRT

Correlation with SSRT

a	Transient activations	Rho	p(1-tailed)
	aLOFC	-0.390	0.068
	AIFO	0.200	0.229
	SFS	0.093	0.366
	pLOFC	0.576	0.01*
	FPC	-0.265	0.161
	RLPFC	-0.174	0.260
	IFS	0.132	0.313
b	PPI		
		Right AIFO seed PPI	
		Rho	p(1-tailed)
	aLOFC	-0.494	0.026
	SFS	-0.365	0.082
	pLOFC	-0.565	0.011
	FPC	-0.503	0.024
	RLPFC	-0.094	0.364
	IFS	-0.182	0.25
	SMC1	-0.638	0.004
	SMC2	-0.203	0.225
	SMC3	-0.521	0.019
		Left AIFO seed	
		Rho	p(1-tailed)
	aLOFC	-0.468	0.034
	SFS	-0.232	0.193
	pLOFC	-0.618	0.005
	FPC	-0.403	0.061
	RLPFC	0.032	0.453
	IFS	0.053	0.423
	SMC1	-0.356	0.088
	SMC2	-0.356	0.088
	SMC3	-0.506	0.023
		preSMA seed	
		Rho	p(1-tailed)
	aLOFC	-0.476	0.031
	SFS	-0.003	0.496
	pLOFC	-0.335	0.102
	FPC	-0.444	0.042
	RLPFC	-0.374	0.077
	IFS	-0.441	0.044
	SMC1	-0.303	0.127
	SMC2	0.171	0.264
	SMC3	-0.168	0.267

N =16 participants with 1 condition (INHIBITION task) - numbers in bold are significant at p<0.05 1 tailed

*Opposite direction of effect to predicted

Supplementary Table 4 – MNI coordinates for the individually defined STN ROIs

X	Y	Z	Participant	Hemisphere
-6	-18	-12	1	Left
-6	-15	-6	2	
-6	-18	-6	3	
-6	-15	-9	4	
-6	-15	-6	5	
-9	-15	-3	6	
-6	-15	-6	7	
-9	-15	-6	8	
-6	-15	-9	9	
-9	-15	-6	10	
-9	-18	-6	11	
-9	-15	-6	12	
-6	-15	-6	13	
-6	-15	-6	14	
-6	-15	-9	15	
-6	-15	-6	16	
9	-18	-12	1	Right
9	-15	-6	2	
6	-18	-9	3	
6	-15	-9	4	
9	-15	-9	5	
9	-18	-3	6	
6	-15	6	7	
12	-15	-6	8	
6	-15	-9	9	
9	-15	-6	10	
9	-15	-6	11	
9	-15	-6	12	
9	-15	-6	13	
6	-15	-9	14	
6	-15	-9	15	
9	-15	-6	16	