

Table S1. Correlations between Impulsivity and Aggression Measures

	Urgency Scale					Impulsive/ Premeditated Aggression			
	1	2	3	4	5	6	7	8	9
Patients									
1. Negative Urgency	--								
2. Positive Urgency	.67^{***} 30	--							
3. Premeditated	-.12 30	-.06 30	--						
4. Perverserance	.14 30	.17 30	.58^{***} 30	--					
5. Sensation Seeking	.32 ⁺ 30	.32 ⁺ 30	-.31 ⁺ 30	-.22 30	--				
6. Impulsive Aggression	.48^{**} 27	.25 27	-.21 27	-.38[*] 27	.32 ⁺ 27	--			
7. Premeditated Aggression	.27 27	.07 27	-.15 27	-.33 ⁺ 27	.00 27	.66^{***} 27	--		
8. Aggression Questionnaire	.58^{***} 30	.52^{**} 30	-.23 30	.05 30	.24 30	.54^{**} 27	.44[*] 27	--	
9. Life History of Aggression	.43⁺ 21	.30 21	-.10 21	-.10 21	.36 ⁺ 21	.40 ⁺ 19	.17 19	.58^{**} 21	--
10. PANSS Positive	.15 23	.04 23	-.07 23	-.03 23	-.03 23	.05 21	.45[*] 21	.13 23	.23 18
11. PANSS Negative	-.38 ⁺ 23	-.07 23	.37 ⁺ 23	.14 23	-.42[*] 23	.37 ⁺ 21	-.19 21	-.46⁺ 23	-.52⁺ 18
Controls									
1. Negative Urgency	--								
2. Positive Urgency	.80^{***} 28	--							
3. Premeditated	.10 28	.01 28	--						
4. Perverserance	.24 28	.10 28	.62^{***} 28	--					
5. Sensation Seeking	.30 28	.32 ⁺ 28	-.31 ⁺ 28	-.37[*] 28	--				
6. Impulsive Aggression	.31 24	.15 24	-.11 24	.06 24	.05 24	--			
7. Premeditated Aggression	.07 24	-.03 24	-.29 24	-.15 24	.12 24	.64^{***} 25			
8. Aggression Questionnaire	.51^{***} 28	.48^{**} 28	-.06 28	.09 28	.49^{**} 28	.24 25	.10 25	--	
9. Life History of Aggression	.32 25	.51^{**} 25	.09 25	.01 25	.41⁺ 25	.07 21	-.05 21	.57^{**} 25	--

Note: ^{***}p<.001, ^{**}p<.01, ^{*}p<.05, ⁺p<.10. Top of each row shows correlation, bottom shows *df*. Statistically significant correlations are in **bold**.

Table S2. Group differences in resting state functional connectivity for inferior frontal ROIs

Seed	Connected Region	Coordinate ^a	Size ^b	Z	p
Controls > Patients					
Left lateral orbitofrontal cortex	Left superior frontal gyrus/BA 10	-9,69,18	342	3.90	.00021
	Right insula/BA 13, 22	45,-6,3	266	3.48	.0015
	Right caudate	21,-42,15	196	3.83	.011
Left medial orbitofrontal cortex	Right precentral gyrus, BA 4	18,-27,60	907	3.78	5.96x10 ⁻⁸
	Left superior temporal gyrus, inferior parietal lobule/BA 42,40	-63,-33,21	441	4.14	.00019
	Right insula	33,15,6	408	4.19	.00036
	Right inferior parietal lobule	57,-24,24	218	3.50	.021
Left rostral anterior cingulate	Right paracentral lobule/BA 31	3,-21,45	1392	4.06	6.65x10 ⁻⁹
	Right superior temporal gyrus, insula/BA 22, 13	48,6,0	636	3.77	6.46x10 ⁻⁵
	Left inferior parietal lobule/BA 40	-63,-27,24	562	3.56	.00019
Right lateral orbitofrontal cortex	Right medial frontal gyrus/BA 10	3,45,12	236	4.02	.0032
	Right superior frontal gyrus/BA 10	21,60,-6	180	4.01	.0167
Right medial orbitofrontal cortex	Right postcentral gyrus/BA 3	21,-27,60	1236	4.35	1.48x10 ⁻⁹
	Right precentral gyrus/BA 6	51,-6,6	556	4.50	3.37x10 ⁻⁵
	Left superior temporal gyrus/BA 42	-60,-33,18	206	4.64	.033
Right rostral anterior cingulate	Right superior temporal gyrus/inferior frontal	39,9,-12	922	4.32	3.58x10 ⁻⁷
	Right cingulate/paracentral lobule, BA 31	3,-24,42	682	3.78	1.05x10 ⁻⁵
	Left anterior cingulate/BA 32	-6,39,18	379	4.04	.0015
Patients > Controls					
Left rostral anterior cingulate	Right superior frontal gyrus	9,48,33	381	3.81	.0031
	Left inferior frontal gyrus/BA 47	-51,30,-9	242	4.18	.037
Right lateral orbitofrontal cortex	Right cuneus/BA 18	12,-81,27	274	3.71	.0011
Right medial orbitofrontal cortex	Right middle occipital gyrus/cuneus/BA 19	24,-99,15	291	4.04	.005
	Left middle occipital gyrus/BA 18	-24,-87,18	250	3.89	.012

Note: Data from 31 patients and 28 controls. ^aTalairach x,y,z coordinate, ^bVoxels, ^cBA = Brodmann area. Effects are significant by Gaussian Random Field correction (p < .05, corrected).

Table S3. Correlations between positive and negative urgency and resting state functional connectivity for inferior frontal ROIs in A) Patients and B) Controls

A) Patients						
Network	Seed^c	Connected Region	Coordinate^a	Size^b	Z	p
Negative Correlations						
Positive urgency						
1	Right frontal pole	Right rostral anterior cingulate/BA 32	3,36,18	313	4.32	<.0001
Negative urgency						
2	Left lateral orbitofrontal cortex	Left middle frontal gyrus /BA 11	-24,36,-3	217	3.90	.0035
		Left lentiform nucleus	-27,6,-3	--	3.34	--
3	Left medial orbitofrontal cortex	Left superior frontal gyrus/BA 6	-18,33,57	241	4.12	.0030
		Left superior frontal gyrus/BA 10	-21,57,0	--	3.81	--
		Right rostral anterior cingulate/BA 10,32	9,42,-6	232	4.11	.0038
		Left medial frontal gyrus/BA 10	0,63,21	--	3.48	--
4	Left rostral anterior cingulate	Left superior/medial frontal gyrus	-18,54,6	119	4.09	.030
Positive Correlations						
Positive urgency						
5	Left frontal pole	Right middle occipital gyrus/BA 18	27,-81,-9	134	3.73	.031
Negative urgency						
6	Left lateral orbitofrontal cortex	Right inferior/middle frontal gyrus/BA 9	36,9,27	212	4.33	.0041
		Right middle frontal gyrus/BA 6	36,6,57	--	2.81	--
		Left cingulate gyrus/BA 24	0,-15,30	160	3.91	.022
		Right cingulate gyrus	9,-33,33	--	3.11	--
7	Left medial orbitofrontal cortex	Left precuneus/BA 7	-9,-51,54	244	4.02	.0027
8	Left frontal pole	Right superior parietal lobule	6,-69,60	135	3.69	.031
9	Right medial orbitofrontal cortex	Right cuneus/BA 18	9,-84,15	194	3.37	.0054
B) Controls						
Negative Correlations						
Positive urgency						
10	Right lateral orbitofrontal cortex	Right insula/BA 13	33,-24,12	130	3.69	.047
Negative urgency						
11	Right lateral orbitofrontal cortex	Right insula	36,-18,3	191	4.46	.012
1	Right frontal pole	Right posterior insula	30,-21,15	170	4.07	.020
		Right postcentral gyrus/BA 42	60,-9,15	161	3.29	.027
			60,9,39	--	3.29	--
Positive Correlations						
Positive urgency						
12	Left rostral anterior cingulate	Left claustrum	-33,-12,-6	251	4.16	.0016
		Left inferior parietal lobule	-60,-24,27	--	3.14	--
5	Left frontal pole	Left putamen	-27,3,-6	267	4.41	.00081
		Left insula	-24,-15,18	--	3.03	--
13	Right rostral anterior cingulate	Left parahippocampal gyrus	-33,-9,-9	262	4.42	.0016
Negative urgency						
14	Left frontal pole	Left putamen	-27,3,6	211	4.02	.0053
15	Right lateral orbitofrontal cortex	Right superior temporal gyrus	57,-48,18	153	3.80	.04

Note: Data from 31 patients and 28 controls. ^aTalairach x,y,z coordinates, ^bVoxels, ^cBA = Brodmann area, regions without cluster sizes and p-values are local maxima. Effects are significant by Gaussian Random Field correction (p < .05, corrected).