

Supplementary Table S1 Design and contrast matrix for comparison of the TS only and TS+ADHD groups

	TS only	TS+ADHD	Sex	Age at MRI	Mean FD
Subject 1	1	0	1	12.75	0.16
Subject 2	0	1	0	11.72	0.14
Contrast 1	-1	1	0	0	0
Contrast 2	1	-1	0	0	0

ADHD = attention-deficit/hyperactivity disorder; TS = Tourette syndrome.

Supplementary Table S2 Design and contrast matrix for group × inhibitory control interaction analysis

	TS only × Inhibition score	TS+ADHD × Inhibition score	TS only	TS+ADHD	Sex	Age at MRI	Mean FD
Subject 1	416.4	0	1	0	1	12.75	0.16
Subject 2	0	333.6	0	1	0	11.72	0.14
Contrast 1	-1	1	0	0	0	0	0
Contrast 2	1	-1	0	0	0	0	0

ADHD = attention-deficit/hyperactivity disorder; FD = framewise displacement; MRI = magnetic resonance imaging; TS = Tourette syndrome.

Supplementary Table S3 Design and contrast matrix for assessing the association between inhibitory control and functional connectivity (combined TS and TS+ADHD group)

	TS only	TS+ADHD	Inhibition score	Sex	Age at MRI	Mean FD
Subject 1	1	0	416.4	1	12.75	0.16
Subject 2	0	1	333.6	0	11.72	0.14
Contrast 1	0	0	1	0	0	0
Contrast 2	0	0	-1	0	0	0

ADHD = attention-deficit/hyperactivity disorder; FD = framewise displacement; MRI = magnetic resonance imaging; TS = Tourette syndrome.

Supplementary Table S4 Coordinates of regions within the subnetworks showing significant differences between the TS only and TS+ADHD groups

Region A name	Center (MNI)			Region B name	Center (MNI)			Test stat
7Networks_LH_SomMot_3	-37	-21	16	7Networks_LH_SomMot_4	-55	-4	10	3.5
7Networks_LH_SomMot_4	-55	-4	10	7Networks_LH_Limbic_TempPole_1	-29	-6	-39	3.57
7Networks_LH_SomMot_4	-55	-4	10	7Networks_LH_Limbic_TempPole_3	-28	10	-34	3.65
7Networks_LH_SomMot_5	-53	-22	18	7Networks_LH_Limbic_TempPole_3	-28	10	-34	3.88
7Networks_LH_SomMot_7	-47	-9	46	7Networks_LH_Limbic_TempPole_3	-28	10	-34	3.81
7Networks_LH_SomMot_10	-40	-25	57	7Networks_LH_Limbic_TempPole_3	-28	10	-34	3.72
7Networks_LH_Limbic_TempPole_3	-28	10	-34	7Networks_LH_Default_Temp_3	-56	-6	-12	3.72
7Networks_LH_SalVentAttn_FrOperIns_4	-51	9	11	7Networks_LH_Default_PFC_1	-35	20	-13	3.79
7Networks_LH_SomMot_7	-47	-9	46	7Networks_LH_Default_PFC_5	-52	22	8	3.58
7Networks_LH_Limbic_TempPole_4	-43	8	-19	7Networks_LH_Default_PHC_1	-26	-32	-18	3.87
7Networks_LH_Limbic_TempPole_4	-43	8	-19	7Networks_RH_Vis_2	28	-36	-14	3.65
7Networks_LH_Limbic_TempPole_3	-28	10	-34	7Networks_RH_SomMot_3	38	-13	15	3.68
7Networks_LH_Limbic_TempPole_4	-43	8	-19	7Networks_RH_SomMot_3	38	-13	15	3.53
7Networks_RH_SomMot_1	51	-15	5	7Networks_RH_SomMot_3	38	-13	15	3.89
7Networks_LH_SomMot_3	-37	-21	16	7Networks_RH_SomMot_5	59	0	10	3.58
7Networks_LH_SomMot_5	-53	-22	18	7Networks_RH_SomMot_5	59	0	10	3.75
7Networks_LH_Default_PFC_5	-52	22	8	7Networks_RH_SomMot_5	59	0	10	4.05
7Networks_LH_Limbic_TempPole_3	-28	10	-34	7Networks_RH_SomMot_8	10	-15	41	3.52
7Networks_LH_Limbic_TempPole_3	-28	10	-34	7Networks_RH_SomMot_10	47	-11	48	3.84
7Networks_LH_SalVentAttn_FrOperIns_4	-51	9	11	7Networks_RH_SomMot_11	7	-11	51	3.9
7Networks_LH_Default_PFC_5	-52	22	8	7Networks_RH_SomMot_11	7	-11	51	4.31
7Networks_RH_SomMot_5	59	0	10	7Networks_RH_DorsAttn_PrCv_1	52	11	21	3.93
7Networks_LH_Limbic_TempPole_3	-28	10	-34	7Networks_RH_SalVentAttn_PrC_1	51	4	40	4.2
7Networks_LH_Default_PFC_5	-52	22	8	7Networks_RH_SalVentAttn_Med_1	7	9	41	3.58

Region A name	Center (MNI)			Region B name	Center (MNI)			Test stat
7Networks_LH_Default_PHC_1	-26	-32	-18	7Networks_RH_SalVentAttn_Med_1	7	9	41	3.56
7Networks_LH_SalVentAttn_FrOperIns_4	-51	9	11	7Networks_RH_Limbic_OFC_2	28	22	-19	3.9
7Networks_LH_Default_Temp_3	-56	-6	-12	7Networks_RH_Limbic_TempPole_1	30	9	-38	3.67
7Networks_RH_SomMot_5	59	0	10	7Networks_RH_Cont_PFCI_4	46	24	26	3.71
7Networks_RH_SomMot_11	7	-11	51	7Networks_RH_Default_Temp_3	55	-6	-10	3.51
7Networks_RH_Vis_10	22	-60	7	7Networks_RH_Default_Temp_5	52	-31	2	4.25
7Networks_RH_SomMot_3	38	-13	15	7Networks_RH_Default_Temp_5	52	-31	2	3.59
7Networks_RH_SomMot_11	7	-11	51	7Networks_RH_Default_Temp_5	52	-31	2	3.52
7Networks_RH_Default_Par_1	47	-69	27	7Networks_RH_Default_PFCdPFCm_3	6	29	15	3.92
7Networks_LH_Limbic_TempPole_4	-43	8	-19	IAMY-rh	28	-2	-22	4.11
7Networks_RH_SomMot_3	38	-13	15	IAMY-rh	28	-2	-22	3.95
7Networks_LH_Limbic_OFC_1	-24	22	-20	mAMY-rh	22	-6	-16	3.74
7Networks_LH_Limbic_TempPole_1	-29	-6	-39	mAMY-rh	22	-6	-16	4.08
7Networks_LH_Limbic_TempPole_3	-28	10	-34	mAMY-rh	22	-6	-16	3.72
7Networks_LH_Default_Temp_1	-47	8	-33	mAMY-rh	22	-6	-16	3.69
7Networks_LH_Default_Par_2	-39	-80	31	mAMY-rh	22	-6	-16	4.22
7Networks_LH_Default_PFC_7	-8	59	21	mAMY-rh	22	-6	-16	3.96
7Networks_RH_Default_Par_1	47	-69	27	mAMY-rh	22	-6	-16	3.73
7Networks_RH_Default_PFCdPFCm_4	8	58	18	mAMY-rh	22	-6	-16	4
7Networks_RH_Default_Par_1	47	-69	27	aPUT-rh	24	8	-2	3.77
7Networks_LH_Default_Par_2	-39	-80	31	mAMY-lh	22	-6	-16	3.94
7Networks_LH_Default_PFC_5	-52	22	8	mAMY-lh	22	-6	-16	3.91
7Networks_RH_Default_Par_1	47	-69	27	mAMY-lh	22	-6	-16	3.64

Node coordinates of the subnetwork derived from the Schaefer 200-parcel 7-network (Schaefer A, Kong R, Gordon EM, Laumann TO, Zuo XN, Holmes AJ, et al. Local-global parcellation of the human cerebral cortex from intrinsic functional connectivity MRI. *Cereb Cortex*. 2018;28:3095-3114).

Supplementary Table S5 Coordinates of regions associated with inhibitory control in the subnetworks identified across all TS participants (TS only and TS+ADHD groups)

Region A name	Center (MNI)			Region B name	Center (MNI)			Test stat
7Networks_LH_SalVentAttn_ParOper_1	-56	-40	20	7Networks_LH_SalVentAttn_ParOper_2	-61	-26	28	3.57
7Networks_LH_Vis_13	-7	-87	28	7Networks_LH_Cont_PFCI_2	-28	58	8	5.34
7Networks_LH_Vis_14	-23	-87	23	7Networks_LH_Cont_PFCI_2	-28	58	8	4.5
7Networks_LH_SalVentAttn_FrOperIns_3	-39	1	11	7Networks_LH_Cont_pCun_1	-9	-73	38	4.21
7Networks_LH_SomMot_2	-53	-24	9	7Networks_LH_Default_Par_3	-57	-54	28	4.76
7Networks_LH_SomMot_5	-53	-22	18	7Networks_LH_Default_Par_3	-57	-54	28	4.01
7Networks_LH_SalVentAttn_ParOper_2	-61	-26	28	7Networks_LH_Default_Par_3	-57	-54	28	6.19
7Networks_LH_Vis_13	-7	-87	28	7Networks_LH_Default_pCunPCC_3	-4	-31	36	4.11
7Networks_LH_DorsAttn_FEF_1	-31	-4	53	7Networks_RH_Vis_10	22	-60	7	4.24
7Networks_LH_Cont_PFCI_2	-28	58	8	7Networks_RH_Vis_11	42	-80	10	5.06
7Networks_LH_Cont_PFCI_2	-28	58	8	7Networks_RH_Vis_12	20	-90	22	4.26
7Networks_LH_Cont_PFCI_2	-28	58	8	7Networks_RH_SomMot_4	44	-27	18	3.72
7Networks_LH_Default_Par_3	-57	-54	28	7Networks_RH_SomMot_4	44	-27	18	4.67
7Networks_LH_Cont_PFCI_2	-28	58	8	7Networks_RH_SomMot_8	10	-15	41	4.85
7Networks_LH_Cont_PFCI_3	-42	40	16	7Networks_RH_SomMot_8	10	-15	41	4.34
7Networks_LH_Default_PFC_4	-12	63	-6	7Networks_RH_SomMot_8	10	-15	41	4.52
7Networks_LH_Limbic_TempPole_2	-45	-20	-30	7Networks_RH_DorsAttn_Post_1	50	-53	-15	4.41
7Networks_LH_Cont_Temp_1	-61	-43	-13	7Networks_RH_DorsAttn_Post_1	50	-53	-15	3.82
7Networks_LH_Default_pCunPCC_3	-4	-31	36	7Networks_RH_DorsAttn_Post_7	34	-48	51	3.93
7Networks_LH_Default_Par_3	-57	-54	28	7Networks_RH_SalVentAttn_TempOccPar_3	60	-26	27	4.31
7Networks_LH_DorsAttn_FEF_1	-31	-4	53	7Networks_RH_SalVentAttn_FrOperIns_1	41	6	-15	4.2
7Networks_LH_SalVentAttn_Med_1	-6	9	41	7Networks_RH_SalVentAttn_FrOperIns_1	41	6	-15	4.64
7Networks_LH_Cont_PFCI_2	-28	58	8	7Networks_RH_SalVentAttn_FrOperIns_1	41	6	-15	4.33

Region A name	Center (MNI)			Region B name	Center (MNI)			Test stat
7Networks_LH_Default_PFC_12	-24	25	49	7Networks_RH_SalVentAttn_FrOperIns_1	41	6	-15	4.23
7Networks_LH_Cont_PFCI_2	-28	58	8	7Networks_RH_SalVentAttn_Med_2	11	-36	47	4.49
7Networks_LH_SomMot_2	-53	-24	9	7Networks_RH_Limbic_OFC_3	15	64	-8	4.29
7Networks_LH_SalVentAttn_FrOperIns_3	-39	1	11	7Networks_RH_Limbic_OFC_3	15	64	-8	4.17
7Networks_RH_SalVentAttn_FrOperIns_1	41	6	-15	7Networks_RH_Limbic_OFC_3	15	64	-8	4.11
7Networks_LH_SomMot_3	-37	-21	16	7Networks_RH_Cont_PFCI_2	29	58	5	4.11
7Networks_RH_Vis_11	42	-80	10	7Networks_RH_Cont_PFCI_2	29	58	5	4.77
7Networks_RH_SomMot_4	44	-27	18	7Networks_RH_Cont_PFCI_2	29	58	5	4.31
7Networks_RH_SomMot_6	56	-11	14	7Networks_RH_Cont_PFCI_2	29	58	5	4.14
7Networks_RH_SomMot_8	10	-15	41	7Networks_RH_Cont_PFCI_2	29	58	5	3.67
7Networks_RH_SalVentAttn_Med_2	11	-36	47	7Networks_RH_Cont_PFCmp_2	7	25	55	4.38
7Networks_LH_Vis_3	-45	-69	-8	7Networks_RH_Default_Par_2	54	-50	28	3.77
7Networks_LH_DorsAttn_Post_5	-41	-35	47	7Networks_RH_Default_Par_2	54	-50	28	4.14
7Networks_RH_DorsAttn_Post_1	50	-53	-15	7Networks_RH_Default_Par_2	54	-50	28	3.88
7Networks_RH_DorsAttn_Post_5	41	-31	46	7Networks_RH_Default_Par_2	54	-50	28	3.79
7Networks_RH_SomMot_4	44	-27	18	7Networks_RH_Default_Par_3	51	-59	44	4.33
7Networks_LH_DorsAttn_Post_6	-33	-49	47	7Networks_RH_Default_Temp_2	61	-13	-21	3.57
7Networks_RH_DorsAttn_Post_1	50	-53	-15	7Networks_RH_Default_Temp_2	61	-13	-21	4.45
7Networks_LH_Default_PFC_4	-12	63	-6	7Networks_RH_Default_PFCv_1	51	28	0	4.23
7Networks_RH_DorsAttn_Post_1	50	-53	-15	7Networks_RH_Default_PFCdPFCm_4	8	58	18	4.94
7Networks_RH_DorsAttn_Post_1	50	-53	-15	7Networks_RH_Default_PFCdPFCm_5	15	46	44	3.75
7Networks_LH_Vis_13	-7	-87	28	7Networks_RH_Default_PFCdPFCm_6	29	30	42	4.19
7Networks_LH_SomMot_1	-51	-4	-2	7Networks_RH_Default_PFCdPFCm_7	23	24	53	4.24
7Networks_LH_DorsAttn_Post_5	-41	-35	47	7Networks_RH_Default_PFCdPFCm_7	23	24	53	4.59
7Networks_LH_Limbic_TempPole_4	-43	8	-19	7Networks_RH_Default_PFCdPFCm_7	23	24	53	4.25

Region A name	Center (MNI)			Region B name	Center (MNI)			Test stat
7Networks_RH_SomMot_9	51	-22	52	7Networks_RH_Default_PFCdPFCm_7	23	24	53	5.01
7Networks_RH_DorsAttn_Post_5	41	-31	46	7Networks_RH_Default_PFCdPFCm_7	23	24	53	4.91
7Networks_RH_SalVentAttn_FrOperIns_1	41	6	-15	7Networks_RH_Default_PFCdPFCm_7	23	24	53	3.66
7Networks_RH_SalVentAttn_FrOperIns_2	46	-4	-4	7Networks_RH_Default_PFCdPFCm_7	23	24	53	4.44
7Networks_LH_Limbic_TempPole_3	-28	10	-34	NAc-core-lh	-12	18	-2	4.46
7Networks_RH_Vis_13	11	-74	26	NAc-core-lh	-12	18	-2	3.76
7Networks_RH_SomMot_4	44	-27	18	NAc-core-lh	-12	18	-2	4.61
7Networks_LH_Limbic_TempPole_3	-28	10	-34	aPUT-lh	-22	8	-2	4.49
7Networks_LH_DorsAttn_FEF_1	-31	-4	53	pPUT-lh	-28	-6	4	4.11

Node coordinates of the subnetwork derived from the Schaefer 200-parcels 7-network (Schaefer A, Kong R, Gordon EM, Laumann TO, Zuo XN, Holmes AJ, et al. Local-global parcellation of the human cerebral cortex from intrinsic functional connectivity MRI. *Cereb Cortex*. 2018;28:3095-3114).