

Online-Only Supplementary Material

1. Full list of clinical assessment instruments

a. Adolescent information

- **DSM-5 Self-Rated Level 1 Cross-Cutting Symptom Measure - Child Age 11–17:** a self-report tool that quickly assesses 12 psychiatric constructs over the previous 2 weeks.¹
- **Wechsler Abbreviated Scale of Intelligence (WASI), Brazilian version:** brief, psychometrically reliable intelligence scale for clinical and research purposes.²
- **Parental Bonding Instrument (PBI):** evaluates parental relationships to adolescents from the adolescent's perspective.³
- **Self-Administered Physical Activity Checklist, adapted version:** self-report questionnaire to evaluate time and intensity of physical activity in adolescents.⁴
- **Mood and Feelings Questionnaire Child Self-Report (MFQ-C), Brazilian version:** tool for assessment of depressive symptoms in children and adolescents.⁵
- **Childhood Trauma Questionnaire (CTQ), Brazilian version:** self-reported measure of traumatic experiences and maltreatment.⁶
- **Snaith-Hamilton Pleasure Scale (SHAPS):** self-reported assessment of hedonic capacity.⁷
- **Reflective Function Questionnaire for Youth (RFQY):** assessment of reflective function.⁸
- **Affective Reactivity Index (ARI), Brazilian version:** scale for irritability assessment in childhood and adolescence.⁹
- **Mood Disorder Questionnaire (MDQ), Brazilian version:** self-reported questionnaire to assess bipolar disorder spectrum symptoms.¹⁰
- **Spence Children's Anxiety Scale (SCAS), Brazilian version:** self-reported measure to assess child and adolescent anxiety symptomatology.¹¹
- **The Youth Strength Inventory – Adolescent version (YSI-A):** evaluation of positive attributes of the adolescent.¹²
- **Adolescent Resilience Scale (ARS):** evaluates resilience among adolescents.¹³
- **U-Change Home Questionnaire Pack, adapted:** assesses recent potentially stressful life events.¹⁴
- **Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime Version (K-SADS-PL), Brazilian version:** semi-structured diagnostic instrument to assess present and lifetime psychopathology.¹⁵
- **Clinical Global Impression (CGI):** scale to assess disease severity based on clinical impression.¹⁶
- **Children's Depression Rating Scale-Revised (CDRS-R):** clinician-based evaluation of dimensional depressive symptoms.¹⁷
- **Columbia-Suicide Severity Rating Scale (C-SSRS):** scale for evaluation of suicidal behavior, including ideation and planning.¹⁸
- **The Children's Global Assessment Scale (CGAS):** a global functioning scale designed for people under 18 years old, assessing functioning in different domains.¹⁹

b. Parental information

- **DSM-5 Parent/Guardian-Rated Level 1 Cross-Cutting Symptom Measure - Child Age 6–17:** a parent-rated report tool that quickly assesses 12 adolescent psychiatric constructs over the previous 2 weeks.¹
- **Brazilian Economic Classification Criteria (ABEP):** socioeconomic level assessment widely utilized in Brazil.²⁰
- **Affective Reactivity Index Parent-Report (ARI-P):** report of perceived irritability in adolescents.⁹
- **Mood and Feelings Questionnaire – Parent Report on Child (MFQ-P):** parent report of perceived depressive symptoms in the adolescent.⁵
- **Mood and Feelings Questionnaire – Adult Self-Report (MFQ-A):** adult self-report on depressive symptomatology.⁵
- **Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime Version (K-SADS-PL), Brazilian version:** semi-structured diagnostic instrument to assess present and lifetime psychopathology.⁵

2. Resting-state functional connectivity – voxel statistics and coordinates**Seed Region: Medial prefrontal cortex (MPFC)**

x	y	z	cluster size	size p-FDR	peak p-FDR	Region
0	50	-6	24578	<.001	<.001	Medial prefrontal cortex
-2	-48	20	5201	<.001	<.001	Posterior cingulate cortex
-44	-40	42	2714	<.001	<.001	Left inferior parietal lobule
54	-32	48	2228	<.001	<.001	Right supramarginal gyrus
-46	-64	28	1999	<.001	<.001	Left angular gyrus
-60	-14	-16	1413	<.001	<.001	Left middle temporal gyrus
48	-60	34	1306	<.001	<.001	Right angular gyrus
-28	-76	-34	455	<.001	<.001	Left cerebellum
-4	-54	-44	382	<.001	<.001	Left cerebellum
22	-68	-46	354	<.001	<.001	Right cerebellum
28	0	70	304	<.001	<.001	Right superior frontal gyrus
30	-76	-36	255	<.001	<.001	Right cerebellum
8	-64	-18	165	0.000004	0.000001	Right cerebellum
-24	-72	-54	152	0.000008	<.001	Left cerebellum
20	-78	12	145	0.000012	0.000011	Right calcarine sulcus
58	10	14	130	0.000027	0.000001	Right precentral gyrus
-22	-34	12	122	0.000042	<.001	Left medial temporal lobe
-26	-70	12	111	0.000081	0.000001	Left occipital lobe
-38	-32	-28	106	0.000107	<.001	Left fusiform gyrus
-38	42	32	104	0.000116	<.001	Left middle frontal gyrus

Seed Region: Anterior Cingulate Cortex (ACC)

X	y	z	cluster size	size p-FDR	peak p-FDR	Region
-42	12	-6	13149	<.001	<.001	Bilateral insula
2	32	26	12478	<.001	<.001	Anterior cingulate cortex
30	44	24	1753	<.001	<.001	Right middle frontal gyrus
-36	-68	30	1467	<.001	<.001	Left middle occipital cortex
60	-28	24	1174	<.001	<.001	Right supramarginal gyrus
-64	-40	28	867	<.001	<.001	Left supramarginal gyrus
-56	-38	-14	647	<.001	<.001	Left middle temporal gyrus
12	-68	10	498	<.001	<.001	Right calcarine sulcus
38	-68	42	431	<.001	<.001	Right angular gyrus
-48	46	-14	231	<.001	<.001	Left inferior frontal gyrus
62	-34	-18	203	<.001	0.000002	Right inferior temporal gyrus
44	44	-18	200	<.001	<.001	Right inferior frontal gyrus
-32	-52	-34	181	0.000001	<.001	Left cerebellum

Seed region: left lateral prefrontal cortex (LPFC-L)

x	y	z	cluster size	size p-FDR	peak p-FDR	Region
-42	52	-4	14447	<.001	<.001	Left middle frontal gyrus
38	-70	-52	5773	<.001	<.001	Right cerebellum
-48	-46	48	3946	<.001	<.001	Left inferior parietal lobule
46	-62	48	2384	<.001	<.001	Right angular gyrus
-56	-46	-18	1872	<.001	<.001	Left inferior temporal gyrus
-2	2	42	1556	<.001	<.001	Anterior cingulate cortex
64	-42	-12	1481	<.001	<.001	Right middle temporal gyrus
38	-10	0	1198	<.001	<.001	Right posterior insula
-46	-2	0	1139	<.001	<.001	Left superior temporal cortex
-22	-46	60	734	<.001	<.001	Left superior parietal cortex
20	-46	78	235	<.001	<.001	Right postcentral gyrus
32	-44	0	187	0.000001	<.001	Right medial temporal lobe
6	-48	-2	135	0.000017	<.001	Right cerebellum
0	-36	36	123	0.000033	<.001	Posterior cingulate cortex

Seed Region: right lateral prefrontal cortex (LPFC-R)

x	y	z	cluster size	size p-FDR	peak p-FDR	Region
40	56	2	14986	<.001	<.001	Right middle frontal gyrus
48	-48	46	3994	<.001	<.001	Right inferior parietal cortex
-34	-76	-52	3619	<.001	<.001	Left cerebellum
-48	-52	44	2410	<.001	<.001	Left inferior parietal cortex
6	0	52	1772	<.001	<.001	Right supplementary motor area
62	-40	-16	1567	<.001	<.001	Right inferior temporal cortex
42	4	6	1268	<.001	<.001	Right insula
-66	-44	-14	1166	<.001	<.001	Left middle temporal gyrus
-36	-12	6	851	<.001	<.001	Left insula
18	-50	62	720	<.001	<.001	Right superior parietal cortex
4	-38	40	538	<.001	<.001	Posterior cingulate cortex
38	-70	-52	408	<.001	<.001	Right cerebellum
32	-46	0	393	<.001	<.001	Right medial temporal lobe
-16	-16	80	349	<.001	<.001	Left precentral gyrus
44	-68	-34	256	<.001	<.001	Right cerebellum
-30	-10	-20	179	0.000001	<.001	Left hippocampus
-16	-50	64	173	0.000002	<.001	Left precuneus

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