

Supplemental Material

To address the potential confounding factor of multiple psychotropic medications in addition to the stimulant medication status, we conducted analyses of ANCOVA same as the main analyses, excluding the participants who received multiple psychotropic medications in addition to the stimulant medications. This revealed:

1. Replicating the main analysis, there was no significant difference of age, gender, ethnicity, and baseline CBCL scores of Attention Problems, Aggressive Behavior, Externalizing Problems, ADHD-DSM, ODD-DSM, CD-DSM, and Irritability: see Supplementary Table 2.
2. Replicating the main analysis, there was significant improvement in all of the CBCL scores after the completion of the treatment program; see Supplementary Table 3.
3. Replicating the main analysis, there was no significant main effect of stimulant medication status (on stimulant medication vs. no stimulant medication), or interaction between time (pre-treatment program enrollment vs. post-treatment program enrollment) and stimulant medication status on any of the CBCL scores; see Supplementary Table 4.

Supplementary Table 1. Summary of psychotropic medications prescribed to participants

	Number of patients	Mean daily dosage in milligrams	Range of daily dosage in milligrams
Stimulant medication			
Dexmethylphenidate	11	18.6	5–45
Lisdexamfetamine	4	27.5	20–40
Methylphenidate	11	34.7	5–63
Amphetamine salts	9	16.4	2.5–25
Non-stimulant medications			
Alpha-agonists (guanfacine and clonidine)	16		
Atomoxetine	2		
Atypical antipsychotics (Risperidone and Aripiprazole)	10		
Mood stabilizers (Oxcarbazepine, Valproic Acid, and Topiramate)	3		
Antidepressants (Fluoxetine and Sertraline)	4		

Changes of the medications (excluded)	At the beginning of the treatment program enrollment	At the completion of the treatment program enrollment
Participant 1	Methylphenidate XR 25 mg	Methylphenidate XR 25 mg and Clonidine 0.1 mg
Participant 2	Methylphenidate 15 mg	Lisdexamfetamine XR 30 mg and Sertraline 25 mg
Participant 3	Dextroamphetamine XR 10 mg	Dextroamphetamine XR 10 mg and Risperidone 0.5 mg
Participant 4	None	Dextroamphetamine XR 5 mg
Participant 5	None	Methylphenidate XR 10 mg
Participant 6	None	Methylphenidate XR 10 mg

Supplementary Table 2. Characteristics of the participants without multiple psychotropic medications

Variables	Total patients (n = 73)	On stimulants (n = 14)	No stimulant medication (n = 59)	<i>p</i> value
Age	6.4 ± 2.0	5.8 ± 1.9	6.6 ± 2.0	0.17
Sex, male/female	60 (82.2)/13 (17.8)	12 (85.7)/2 (14.3)	48 (81.3)/11 (18.6)	0.18
Race/ethnicity, white/non-white	47 (64.4)/26 (35.6)	9 (64.3)/5 (35.7)	38 (64.4)/21 (35.6)	0.97
Treatment duration	159.9 ± 107.9	165.0 ± 78.4	158.6 ± 114.4	0.84
CBCL score profiles				
Attentional problems	64.7 ± 8.4	65.7 ± 6.8	64.3 ± 9.0	0.59
Aggressive behavior	73.2 ± 13.1	75.7 ± 12.3	72.5 ± 13.7	0.43
Externalizing problems	70.5 ± 10.5	72.2 ± 8.7	69.8 ± 11.2	0.46
ADHD-DSM	64.8 ± 8.6	66.3 ± 7.5	64.4 ± 9.1	0.48
ODD-DSM	70.4 ± 8.3	71.7 ± 6.0	70.0 ± 9.1	0.51
Irritability	4.4 ± 1.6	4.2 ± 1.9	4.5 ± 1.5	0.58
CD-DSM	73.5 ± 8.4 (n = 31)	72.3 ± 6.6 (n = 7)	73.8 ± 8.9 (n = 24)	0.68

Values are presented as mean ± standard deviation or number (%).

CBCL, Child Behavior Checklist; ADHD, Attention-Deficit/Hyperactivity Disorder; ODD, Oppositional Defiant Disorder; CD, Conduct Disorder; DSM, Diagnostic and Statistical Manual of Mental Disorders.

Supplementary Table 3. Pre- and post-intervention (treatment program enrollment) paired *t* test results for main outcomes of interest for the participants without multiple psychotropic medications

Variables	Pre-intervention	Post-intervention	Paired <i>t</i> value	<i>p</i> value
Attentional problems	64.7 ± 8.4	61.3 ± 7.9	4.6	< 0.001
Aggressive behavior	73.2 ± 13.1	63.8 ± 10.4	8.5	< 0.001
Externalizing problems	70.5 ± 10.5	62.0 ± 10.7	9.9	< 0.001
ADHD-DSM	64.8 ± 8.6	61.0 ± 8.3	4.6	< 0.001
ODD-DSM	70.4 ± 8.3	61.7 ± 8.9	9.4	< 0.001
Irritability	4.4 ± 1.6	3.1 ± 1.9	6.6	< 0.001
CD-DSM (n = 51)	73.5 ± 8.4	64.9 ± 7.8	6.3	< 0.001

Values are presented as mean ± standard deviation.

ADHD, Attention-Deficit/Hyperactivity Disorder; ODD, Oppositional Defiant Disorder; CD, Conduct Disorder; DSM, Diagnostic and Statistical Manual of Mental Disorders.

Supplementary Table 4. Time (pre vs. post-program) by stimulant medication status (on stimulant vs. no stimulant medication) ANVOCA results for the participants without multiple psychotropic medications

Variables	Time by stimulant medication status interaction		Main effect of time		Main effect of stimulant medication status	
	F value	<i>p</i> value	F value	<i>p</i> value	F value	<i>p</i> value
Attentional problems	0.31	0.58	0.50	0.48	0.22	0.65
Aggressive behavior	1.10	0.31	2.93	0.09	0.25	0.62
Externalizing problems	0.59	0.45	1.69	0.20	0.08	0.79
ADHD-DSM	0.48	0.49	2.87	0.10	0.66	0.42
ODD-DSM	0.57	0.45	2.10	0.15	0.01	0.92
Irritability	0.13	0.72	1.01	0.32	0.14	0.71
CD-DSM (n = 31)	4.16	0.032*	0.04	0.84	0.64	0.32

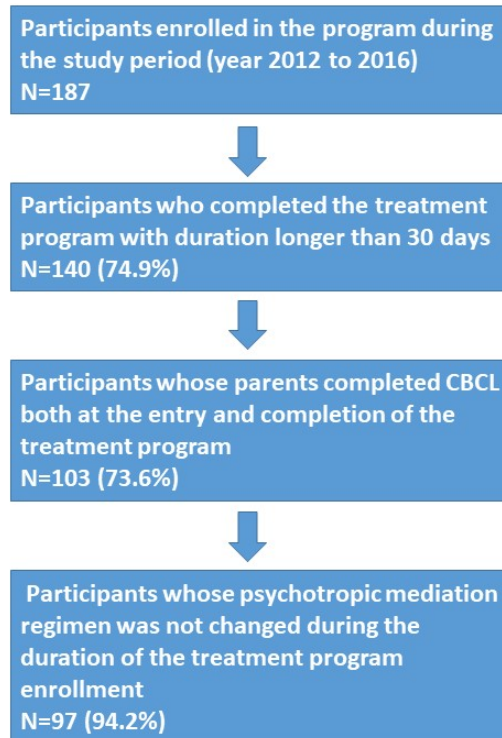
ADHD, Attention-Deficit/Hyperactivity Disorder; ODD, Oppositional Defiant Disorder; CD, Conduct Disorder; DSM, Diagnostic and Statistical Manual of Mental Disorders.

**p* < 0.05.

Supplementary Table 5. Skewness and Kurtosis of the symptom profiles

CBCL score	Total patients (n = 97)	On stimulants (n = 28)	No stimulant medication (n = 69)
Attentional problems	0.151	0.319	0.119
Aggressive behavior	0.036	0.072	0.014
Externalizing problems	-0.515	-0.769	-0.467
ADHD-DSM	-0.243	-0.393	-0.186
ODD-DSM	-0.729	-0.847	-0.741
Irritability	-0.858	-0.844	-0.812
CD-DSM	-0.070 (n = 51)	0.147 (n = 19)	-0.213 (n = 32)

CBCL, Child Behavior Checklist; ADHD, Attention-Deficit/Hyperactivity Disorder; ODD, Oppositional Defiant Disorder; CD, Conduct Disorder; DSM, Diagnostic and Statistical Manual of Mental Disorders.



Supplementary Fig. 1. Data screening process for chart review. CBCL, Child Behavior Checklist.