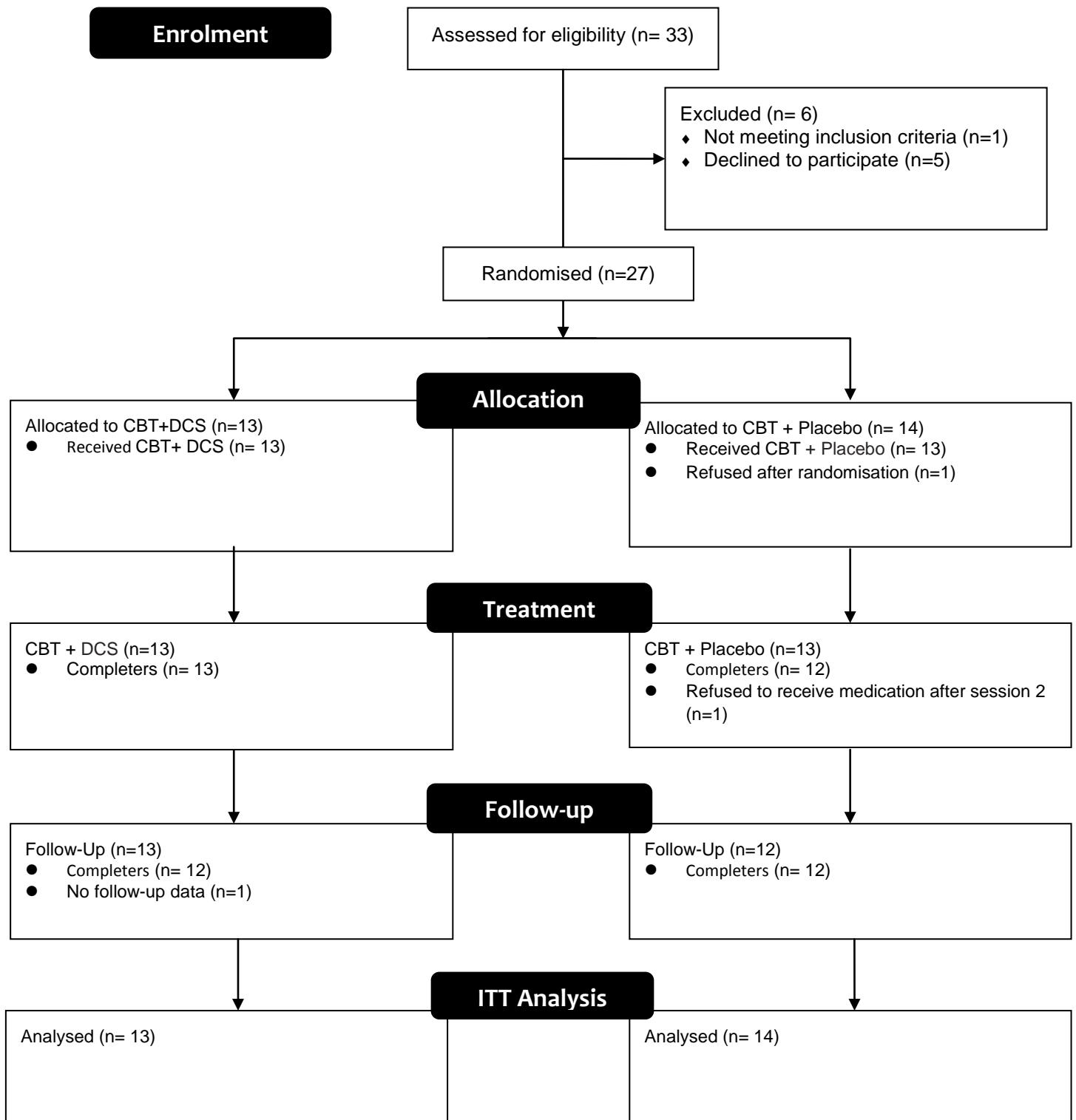


Fig. DS1 CONSORT diagram.



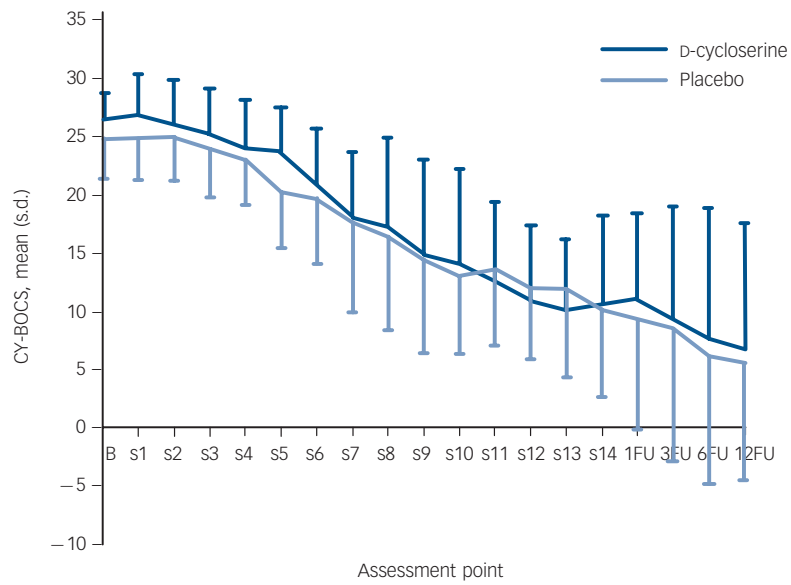


Fig. DS2 Session-by-session masked severity ratings on the primary outcome measure (Children's Yale-Brown Obsessive Compulsive Scale (CY-BOCS)).

Assessment points: baseline (B), sessions 1–14 (s1–14), follow-up at 1, 3, 6 and 12 months (1FU, 3FU, 6FU, 12FU).

Table DS1 Participant characteristics.

	DCS (N=13)	Placebo (N=14)
Age, mean (SD)	14.7(2.1)	15.2(2.0)
Gender (male/female)	5/8	9/5
Psychiatric Comorbidity (N)		
Social Anxiety Disorder	3	3
Specific Phobia	5	2
Generalised Anxiety Disorder	2	1
Body Dysmorphic Disorder	1	0
Major Depression	1	0
Dysthymia	0	2
Tic Disorder	0	3
Attention-Deficit/Hyperactivity Disorder	0	1
Psychotropic Medication at baseline (N)	4	3
Selective Serotonin Reuptake Inhibitors	4	3
Risperidone	0	1
Change of Medication during follow-up (N)	4	1
Dose increased / Started new medication ¹	2	0
Dose reduction / Discontinued medication ²	2	1
Number of attended CBT sessions, mean (SD)	12.6 (2.3)	11.7 (4.6)
Number of DCS/placebo doses administered, mean (SD)	9.1 (1.8)	9.8 (0.4)
ERP homework compliance (PEAS score), mean (SD)	4.9 (0.8)	6.3 (4.1)

DCS: D-Cycloserine; CBT: Cognitive Behaviour Therapy; ERP: Exposure and Response Prevention; PEAS: Patient ERP Adherence Scale.

¹ For one participant, SSRI dose was increased at 3-month follow-up; another started fluoxetine at 6-month follow-up.

² For one participant (placebo), SSRI dose was reduced at 5-month follow-up, and stopped completely at 8-month follow-up. One participant in the DCS group discontinued medication at the end of treatment; another DCS participant's SSRI dose was reduced at 6-month follow-up and stopped completely at 12-month follow-up.

Table DS2 Means, SDs, and effect sizes for outcome measures across assessment points for the two study groups.

Measure	DCS (N=13)		Placebo (N=14)		Effect Sizes Cohen's d [‡]
	Mean	SD	Mean	SD	
CY-BOCS					
Baseline	26.5	3.5	24.8	3.7	0.50
Pre-treatment	26.9	3.7	25.0	3.4	0.53
Mid-treatment	18.1	7.6	17.5	4.6	0.09
End-treatment	10.6	7.4	10.1	6.1	0.07
3M F-up	9.3	11.2	8.5	6.2	0.10
6M F-up	7.6	10.8	6.1	5.4	0.19
12M F-up	6.7	10.1	5.5	6.1	0.15
ChOCI Self					
Pre-treatment	27.2	8.3	25.9	8.1	0.17
End-treatment	10.9	10.4	10.1	8.5	0.08
3M F-up	10.6	12.8	7.2	8.0	0.33
6M F-up	7.3	10.2	3.1	5.2	0.54
12M F-up	6.1	9.3	3.3	6.4	0.36
ChOCI Parent					
Pre-treatment	27.2	7.0	27.0	5.9	0.03
End-treatment	18.5	10.2	7.0	8.5	1.25
3M F-up	11.8	15.8	6.3	9.5	0.43
6M F-up	6.4	10.4	5.1	7.4	0.15
12M F-up	7.1	9.6	10.3	12.0	-0.30
BDI-Y					
Baseline	60.6	14.2	57.6	9.7	0.24
End-treatment	49.1	11.0	51.0	14.4	-0.16
3M F-up	48.4	11.0	49.9	9.6	-0.15
6M F-up	47.6	8.6	46.1	9.5	0.17
12M F-up	44.4	7.5	47.7	12.8	-0.32
CGAS					
Pre-treatment	52.4	6.4	49.0	6.0	0.55
End-treatment	76.2	12.0	74.0	14.0	0.17
3M F-up	77.6	17.1	76.8	14.5	0.06
6M F-up	79.3	17.2	80.1	11.6	-0.06
12M F-up	79.9	18.5	81.0	12.6	-0.07

CY-BOCS: Children's Yale–Brown Obsessive Compulsive Scale, ChOCI: Children's Obsessive–Compulsive Inventory, BDI-Y: Beck Depression Inventory for Youth, CGAS: Clinical Global Assessment Scale

[‡]: Between-group effect size at each time point using pooled standard deviation.