

Data supplement to:

Cooney et al. Computerised cognitive-behavioural therapy for adults with intellectual disability: randomised controlled trial. *Br J Psychiatry* <https://doi.org/10.1192/bjp.bp.117.198630>

Table DS1 Pre-treatment comparisons of demographic characteristics, clinical characteristics and outcome measures of the cCBT and TAU groups

	cCBT group (n=24)	TAU group (n=25)	Statistic ^{a,b}
Age, years: mean (s.d.) range	42.00 (12.85) 23-69	39.24 (9.14) 25-59	$t=0.87$
Gender, n (%)			
Male	8 (33)	11 (44)	$\chi^2=0.59$
Female	16 (67)	14 (56)	
Intellectual disability, n (%)			
Mild (IQ score 50-70)	12 (50)	8 (32)	$\chi^2=1.64$
Moderate (IQ score 35-54)	12 (50)	17 (68)	
IQ score			
No IQ score available, n (%)	14 (58)	17 (68)	$\chi^2=.49$
IQ score available, n (%)	10 (42)	8 (32)	
IQ score, mean (s.d.) range	54.00 (6.00) 44-62	55.63 (7.41) 44-64	$t=-0.52$
WIAT-II ^{UK} score, listening comprehension raw score: mean (s.d.)	16.00 (5.28)	13.80 (5.08)	$t=1.35$
Medication (for mood and anxiety disorders), n (%)			
Receiving medication	12 (50)	10 (40)	$\chi^2=0.50$
Not receiving medication	12 (50)	15 (60)	
Anxiety only or depression only, n (%)			
Anxiety only	13 (65)	10 (43)	$\chi^2=1.99$
Depression only	7 (35)	13 (57)	
Anxiety only and comorbid anxiety and depression, n (%)			
Yes	17 (71)	12 (48)	$\chi^2=2.64$
No	7 (29)	13 (52)	
Depression only and comorbid depression and anxiety, n (%)			
Yes	11 (46)	15 (60)	$\chi^2=0.99$
No	13 (54)	10 (40)	
No other developmental disorder, n (%)			
No other developmental disorder	10 (41)	6 (24)	$\chi^2=1.74$
Other developmental disorder	14 (58)	19 (76)	
Down syndrome, n (%)			
Yes	5 (20)	10 (40)	$\chi^2=2.12$
No	19 (80)	15 (60)	
Epilepsy, n (%)			
Yes	4 (17)	5 (20)	
No	20 (83)	20 (80)	
Cerebral palsy, n (%)			
Yes	4 (17)	2 (8)	
No	20 (83)	23 (92)	
Autism spectrum disorder, n (%)			
Yes	3 (13)	3 (12)	
No	21 (87)	22 (88)	
Fragile X syndrome, n (%)			
Yes	1 (4)	1 (4)	
No	23 (96)	24 (96)	

Hydrocephalus, <i>n</i> (%)			
Yes	0 (0)	1 (4)	
No	24 (100)	24 (96)	
No other psychological disorder, <i>n</i> (%)			$\chi^2=0.17$
No other psychological disorder	14 (58)	16 (64)	
Other psychological disorder	10 (42)	9 (36)	
Adjustment disorder, <i>n</i> (%)			
Yes	6 (25)	3 (12)	
No	18 (75)	22 (88)	
Psychotic depression, <i>n</i> (%)			
Yes	1 (4)	3 (12)	
No	23 (96)	22 (88)	
Obsessive–compulsive disorder, <i>n</i> (%)			
Yes	2 (8)	2 (8)	
No	22 (92)	23 (92)	
Schizoaffective disorder, <i>n</i> (%)			
Yes	1 (4)	0 (0)	
No	23 (96)	25 (100)	
Post-traumatic stress disorder, <i>n</i> (%)			
Yes	1 (4)	0 (0)	
No	23 (96)	25 (100)	
Specific phobias, <i>n</i> (%)			
Yes	1 (4)	0 (0)	
No	23 (96)	25 (100)	
Borderline personality disorder, <i>n</i> (%)			
Yes	0 (0)	1 (4)	
No	24 (100)	24 (96)	
GAS-ID			
<i>n</i>	24	23	
Mean (s.d.)	23.83 (10.83)	24.74 (11.41)	<i>t</i> =0.28
Range, mean	Clinical ^c	Clinical ^c	
Clinical range, <i>n</i>	21	18	
GDS-LD			
<i>n</i>	24	25	
Mean (s.d.)	14.38 (7.22)	15.20 (8.04)	<i>t</i> =0.38
Range, mean	Clinical ^c	Clinical ^c	
Clinical range, <i>n</i>	14	13	
CORE-LD			
<i>n</i>	23	23	
Mean (s.d.)	11.57 (5.92)	12.17 (7.40)	<i>t</i> =0.31

cCBT, computerised cognitive–behavioural therapy; CORE, Clinical Outcomes in Routine Evaluation – Learning Disability; GAS-ID, Glasgow Anxiety Scale for people with an Intellectual Disability; GDS-LD, Glasgow Depression Scale for people with a Learning Disability; TAU, treatment as usual.

a. *t*-value from independent *t*-test.

b. Chi-squared value from Pearson’s Chi-squared tests. Chi-squared tests were not performed on variables that contained cells with an expected count less than 5.

c. Scores of 13 or above fall within the clinical range on the GAS-ID and GDS-LD.

1. The Cognitive Model	1. Formal Sitting Exercise
2. Thought Monitoring	2. Three Minute Breathing Exercise
3. Negative Automatic Thoughts	3. Deep Muscle Relaxation Exercise
4. Cognitive Restructuring	4. Body Scan Meditation
5. Negative Core Beliefs	5. Letting go of upsetting feelings & thoughts exercise
6. Challenging Negative Core Beliefs	6. Soles of the Feet Meditation
7. Relapse Prevention	7. Self Esteem Exercise

Fig. DS1 List of cognitive-behavioural therapy skills and mindfulness and relaxation exercises by game level.

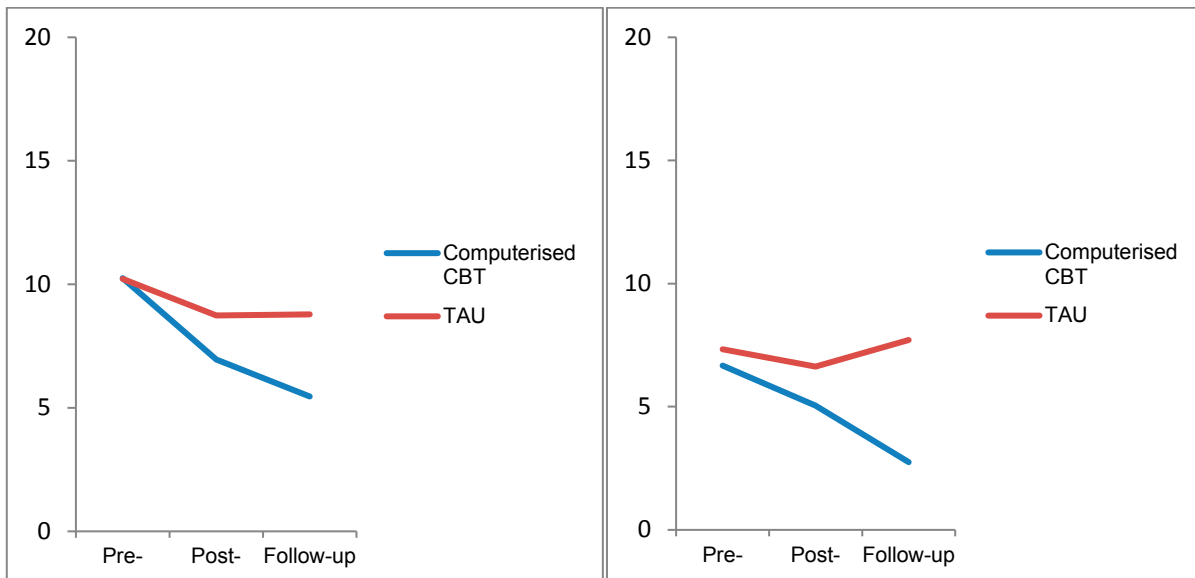
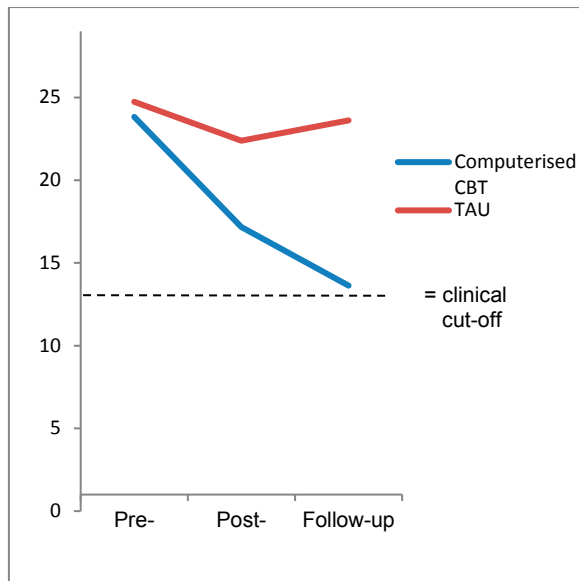


Fig. DS2 Significant improvements in means of the Glasgow Anxiety Scale for people with an Intellectual Disability (GAS-ID) Total symptom score, GAS-ID Worries subscale, and the GAS-ID Physiological Symptoms subscale respectively. CBT, cognitive-behavioural therapy; TAU, treatment as usual.



CONSORT 2010 checklist of information to include when reporting a randomised trial*

Section/Topic	Item No	Checklist item	Reported on page No
Title and abstract			
	1a	Identification as a randomised trial in the title	1
	1b	Structured summary of trial design, methods, results, and conclusions (for specific guidance see CONSORT for abstracts)	2
Introduction			
Background and objectives	2a	Scientific background and explanation of rationale	3
	2b	Specific objectives or hypotheses	4 + 8
Methods			
Trial design	3a	Description of trial design (such as parallel, factorial) including allocation ratio	4
	3b	Important changes to methods after trial commencement (such as eligibility criteria), with reasons	Not applicable
Participants	4a	Eligibility criteria for participants	5
	4b	Settings and locations where the data were collected	5-6
Interventions	5	The interventions for each group with sufficient details to allow replication, including how and when they were actually administered	6-8
Outcomes	6a	Completely defined pre-specified primary and secondary outcome measures, including how and when they were assessed	8-9
	6b	Any changes to trial outcomes after the trial commenced, with reasons	Not applicable
Sample size	7a	How sample size was determined	9
	7b	When applicable, explanation of any interim analyses and stopping guidelines	Not applicable
Randomisation:			
Sequence generation	8a	Method used to generate the random allocation sequence	9
	8b	Type of randomisation; details of any restriction (such as blocking and block size)	9
Allocation concealment mechanism	9	Mechanism used to implement the random allocation sequence (such as sequentially numbered containers), describing any steps taken to conceal the sequence until interventions were assigned	10
Implementation	10	Who generated the random allocation sequence, who enrolled participants, and who assigned participants to interventions	10
Blinding	11a	If done, who was blinded after assignment to interventions (for example, participants, care providers, those assessing outcomes) and how	No masked assessment
	11b	If relevant, description of the similarity of interventions	Not applicable
Statistical methods	12a	Statistical methods used to compare groups for primary and secondary outcomes	10-11
	12b	Methods for additional analyses, such as subgroup analyses and adjusted analyses	10-11
Results			

Participant flow (a diagram is strongly recommended)	13a	For each group, the numbers of participants who were randomly assigned, received intended treatment, and were analysed for the primary outcome	12 + figure 2
	13b	For each group, losses and exclusions after randomisation, together with reasons	12 + figure 2
Recruitment	14a	Dates defining the periods of recruitment and follow-up	13
	14b	Why the trial ended or was stopped	Not applicable
Baseline data	15	A table showing baseline demographic and clinical characteristics for each group	Table 1
Numbers analysed	16	For each group, number of participants (denominator) included in each analysis and whether the analysis was by original assigned groups	Tables 2, 3, 4.
Outcomes and estimation	17a	For each primary and secondary outcome, results for each group, and the estimated effect size and its precision (such as 95% confidence interval)	Tables 2, 3.
	17b	For binary outcomes, presentation of both absolute and relative effect sizes is recommended	Table 3. Remission rates Table 4.
Ancillary analyses	18	Results of any other analyses performed, including subgroup analyses and adjusted analyses, distinguishing pre-specified from exploratory	Not applicable
Harms	19	All important harms or unintended effects in each group (for specific guidance see CONSORT for harms)	16
Discussion			
Limitations	20	Trial limitations, addressing sources of potential bias, imprecision, and, if relevant, multiplicity of analyses	18
Generalisability	21	Generalisability (external validity, applicability) of the trial findings	17
Interpretation	22	Interpretation consistent with results, balancing benefits and harms, and considering other relevant evidence	17-18
Other information			
Registration	23	Registration number and name of trial registry	Not reported
Protocol	24	Where the full trial protocol can be accessed, if available	Not reported
Funding	25	Sources of funding and other support (such as supply of drugs), role of funders	1