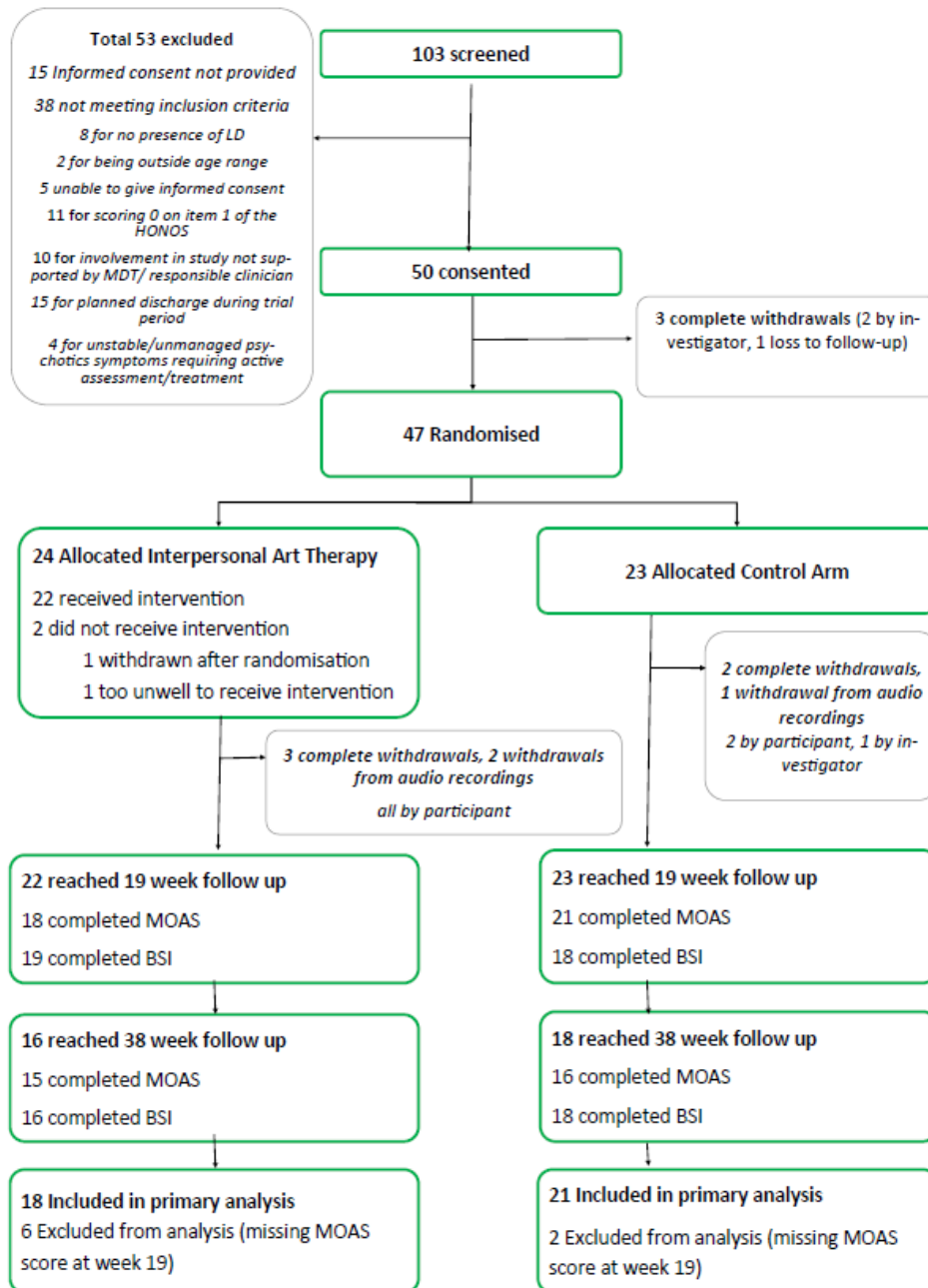


SCHEMA Trial Summary Results

Figure 1 – Consolidated Standards of Reporting Trials diagram



MOAS = Modified Overt Aggression Scale.

Baseline characteristics

Table 2 – Participant demographics and baseline characteristics (for all participants)

	Intervention	Control	Total
N	24 (51.1%)	23 (48.9%)	47 (100.0%)
Age	35.7 (10.7)	38.2 (9.1)	36.9 (9.9)

	N=24	N=23	N=47
Gender			
Female	2 (8.3%)	2 (8.7%)	4 (8.5%)
Male	22 (91.7%)	21 (91.3%)	43 (91.5%)
Ethnicity			
White or British White	18 (75.0%)	14 (60.9%)	32 (68.1%)
Asian or Asian British	0 (0.0%)	2 (8.7%)	2 (4.3%)
Black: Caribbean or African	5 (20.8%)	2 (8.7%)	7 (14.9%)
Mixed or multiple ethnicities	1 (4.2%)	2 (8.7%)	3 (6.4%)
Other ethnicity	0 (0.0%)	3 (13.0%)	3 (6.4%)
Primary Mental Health Diagnosis (ICD-10) *			
None	3 (12.5%)	1.0 (4.3%)	4.0 (8.5%)
1. Mental/behavioural disorders due to psychoactive substance use	0 (0.0%)	1 (4.3%)	1 (2.1%)
2. Schizophrenia, schizotypal and delusional disorders	7 (29.2%)	9 (39.1%)	16 (34.0%)
3. Disorders of adult personality and behaviour	6 (25.0%)	7 (30.4%)	13 (27.7%)
4. Intellectual Developmental Disorder	6 (25.0%)	3 (13.0%)	9 (19.1%)
5. Disorders of psychological development	0 (0.0%)	1 (4.3%)	1 (2.1%)
6. Behavioural/emotional disorders onset in childhood/adolescence	0 (0.0%)	1 (4.3%)	1 (2.1%)
1., 2., 3., 4., and mixed anxiety and depressive disorder	1 (4.2%)	0 (0.0%)	1 (2.1%)
4. & 5.	1 (4.2%)	0 (0.0%)	1 (2.1%)
Length (years) of primary mental health diagnosis	7.0 [4.0, 12.2] N=21	9.0 [5.8, 13.0] N=22	7.4 [4.0, 13.0] N=43
Index offence			
None	3 (12.5%)	1 (4.3%)	4 (8.5%)

Criminal Damage and Arson	2 (8.3%)	3 (13.0%)	5 (10.6%)
Possession of weapons	0 (0.0%)	1 (4.3%)	1 (2.1%)
Public Order Offences	1 (4.2%)	0 (0.0%)	1 (2.1%)
Robbery - Armed	0 (0.0%)	1 (4.3%)	1 (2.1%)
Robbery - unarmed	2 (8.3%)	1 (4.3%)	3 (6.4%)
Sexual Offences - Age not specified	5 (20.8%)	9 (39.1%)	14 (29.8%)
Sexual Offences - Children	6 (25.0%)	2 (8.7%)	8 (17.0%)
Violence against the person	5 (20.8%)	5 (21.7%)	10 (21.3%)
Length (years) of admission	2.7 [1.0, 8.3] N=24	5.8 [1.3, 6.9] N=23	3.2 [1.1, 7.0] N=47
Psychotic illness*			
None	13 (54.2%)	12 (52.2%)	25 (53.2%)
Paranoid schizophrenia	6 (25.0%)	6 (26.1%)	12 (25.5%)
Schizoaffective disorders	1 (4.2%)	0 (0.0%)	1 (2.1%)
Schizoaffective disorder, unspecified	3 (12.5%)	2 (8.7%)	5 (10.6%)
Unspecified nonorganic psychosis	1 (4.2%)	1 (4.3%)	2 (4.3%)
Dissocial personality disorder	0 (0.0%)	1 (4.3%)	1 (2.1%)
Missing	0 (0.0%)	1 (4.3%)	1 (2.1%)
Length (years) of psychotic illness	4.6 [1.2, 8.3] N=10	9.7 [5.8, 12.3] N=10	5.8 [2.6, 11.5] N=20
HoNOS item 1 score			
No problems of this kind during the period rated	0 (0.0%)	1 (4.3%)	1 (2.1%)
Irritability, quarrels, restlessness etc. Not requiring action	11 (45.8%)	11 (47.8%)	22 (46.8%)
Includes aggressive gestures, pushing or pestering others; threats or verbal aggression; lesser damage to property; marked over-activity or agitation	5 (20.8%)	9 (39.1%)	14 (29.8%)
Physically aggressive to others or animals (short of rating 4); threatening	4 (16.7%)	2 (8.7%)	6 (12.8%)

manner; more serious over-activity or destruction of property			
At least one serious physical attack on others or on animals; destruction of property; serious intimidation or obscene behaviour	4 (16.7%)	0 (0.0%)	4 (8.5%)
LDSQ	31.5 (22.2) N=24	40.0 (23.1) N=23	35.7 (22.8) N=47
Full scale IQ	60.9 (9.3) N=18	65.2 (10.7) N=18	63.1 (10.1) N=36
Other health conditions			
No	7 (29.2%)	5 (21.7%)	12 (25.5%)
Yes	17 (70.8%)	18 (78.3%)	35 (74.5%)
Other health condition (denominator = those with another health condition, can have more than one condition) **			
Mild learning disability	1 (5.9%)	1 (5.6%)	2 (5.7%)
Moderate learning disability	0 (0.0%)	1 (5.6%)	1 (2.9%)
Mental Health/Psychiatric	5 (29.4%)	7 (38.9%)	12 (34.3%)
Developmental	6 (35.3%)	6 (33.3%)	12 (34.3%)
Physical Health/Medical	15 (88.2%)	13 (72.2%)	28 (80.0%)
Baseline MOAS score	1.0 [0.0, 3.5] N=24	1.0 [0.0, 1.0] N=23	1.0 [0.0, 3.0] N=47
BSI primary symptom dimensions	N=24	N=23	N=47
Somatization	0.8 (0.7)	0.4 (0.4)	0.6 (0.6)
Obsession compulsion	1.0 (1.0)	1.1 (0.8)	1.0 (0.9)
Interpersonal sensitivity	1.0 (1.0)	0.9 (1.1)	1.0 (1.0)
Depression	0.9 (0.9)	0.9 (0.9)	0.9 (0.9)
Anxiety	0.9 (1.0)	0.9 (0.9)	0.9 (0.9)
Hostility	0.9 (0.8)	0.7 (0.7)	0.8 (0.8)
Phobic anxiety	0.9 (0.8)	0.9 (1.0)	0.9 (0.9)

Paranoid ideation	1.1 (1.0)	1.1 (1.2)	1.1 (1.1)
Psychoticism	0.6 (0.8)	0.7 (0.9)	0.7 (0.8)
Global Severity Index (GSI)	0.9 (0.7) N=24	0.8 (0.7) N=23	0.9 (0.7) N=47
Positive Symptom Total (PST)	21.3 (15.4) N=24	19.2 (13.4) N=23	20.3 (14.3) N=47
Positive Symptom Distress Index (missing for those with zeros for all items)	2.1 (0.5) N=22	2.1 (0.6) N=21	2.1 (0.6) N=43
EQ5D-3L - Adapted version	0.9 [0.8, 1.0] N=20	0.9 [0.9, 1.0] N=20	0.9 [0.9, 1.0] N=40
EQ5D-3L - Adapted version: VAS	9.0 [6.5, 10.0] N=20	7.0 [6.0, 9.5] N=20	8.0 [6.0, 10.0] N=40
EQ5D-3L - Self-report	0.9 (0.1) N=5	0.9 (0.1) N=5	0.9 (0.1) N=10
EQ5D-3L - Self-report: VAS	61.0 (10.2) N=5	80.0 (23.5) N=5	70.5 (19.8) N=10
EQ5D-3L - proxy	0.9 [0.9, 0.9] N=24	1.0 [0.8, 1.0] N=23	0.9 [0.8, 1.0] N=47
EQ5D-3L - Proxy: VAS	75.0 [62.5, 90.0] N=24	78.0 [65.0, 90.0] N=23	75.0 [65.0, 90.0] N=47
ReQol-10 Self report	28.5 [23.5, 34.0] N=24	30.0 [23.0, 34.0] N=23	29.0 [23.0, 34.0] N=47
ReQol-10 Proxy	26.0 [20.0, 30.0] N=24	27.0 [23.0, 30.0] N=23	26.0 [22.0, 30.0] N=47

Primary Outcome Analysis

Figure 3 – Scatterplot of baseline and week 19 Modified Overt Aggression Scale score by arm

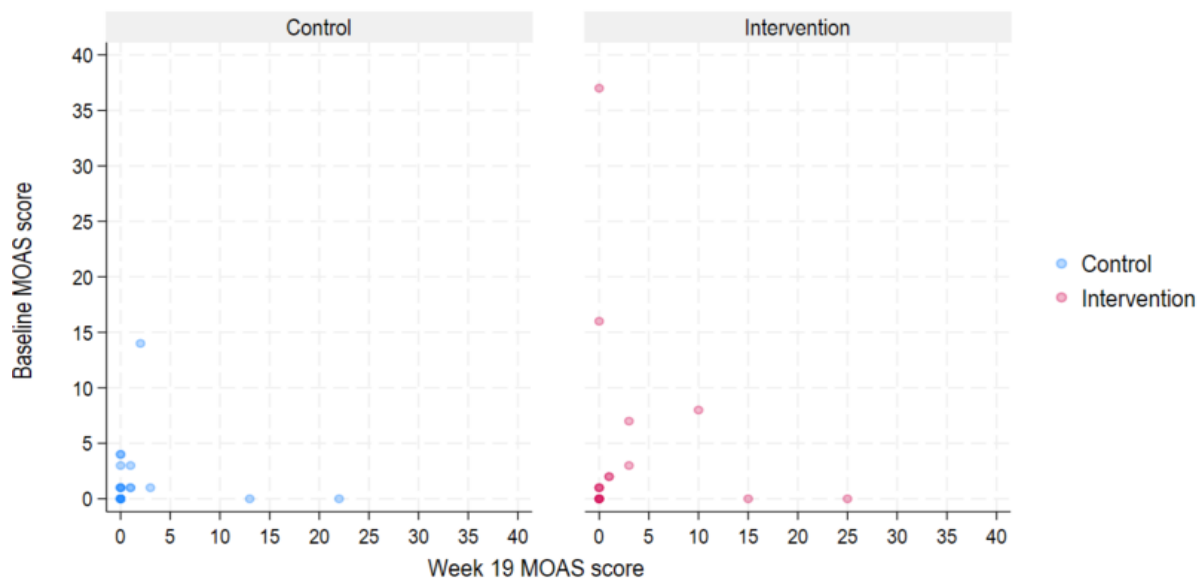


Table 3 – Modified Overt Aggression Scale scores at week-19

	Intervention	Control	Total
N	18 (46.2%)	21 (53.8%)	39 (100%)
Week 19 MOAS score	0.0 [0.0, 3.0]	0.0 [0.0, 1.0]	0.0 [0.0, 1.0]
Change from baseline to week 19	0.0 [-1.0, 0.0]	0.0 [-1.0, 0.0]	0.0 [-1.0, 0.0]

MOAS = Modified Overt Aggression Scale.

A boxplot suggested a slight increase in MOAS scores over time in the control arm, while scores in the intervention arm remained relatively stable (Figure 4).

Figure 4 – Boxplot of Modified Overt Aggression Scale scores at baseline, week-19 and week-38 by trial arm

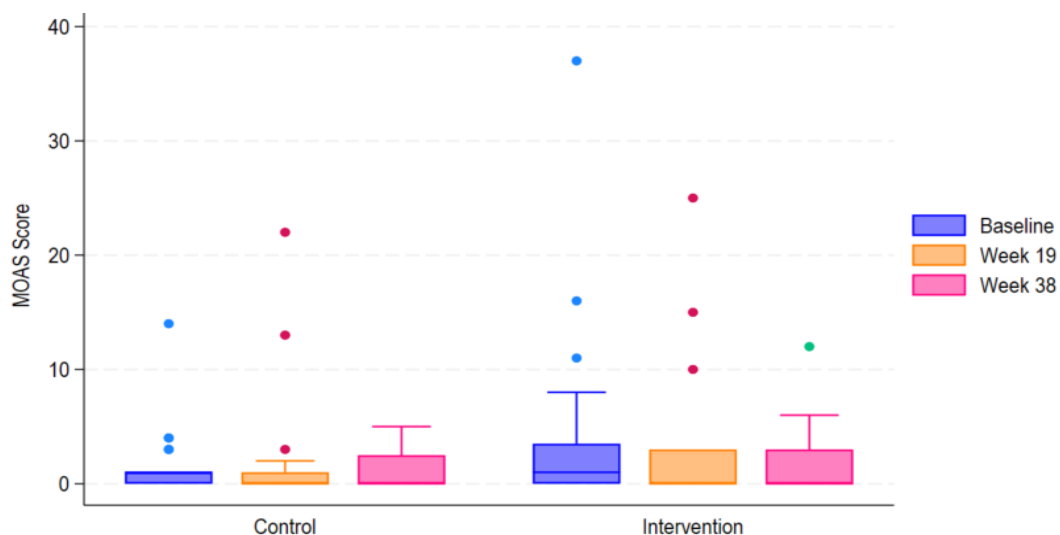


Figure 5 – Histogram of Modified Overt Aggression Scale score at week-19 by trial arm

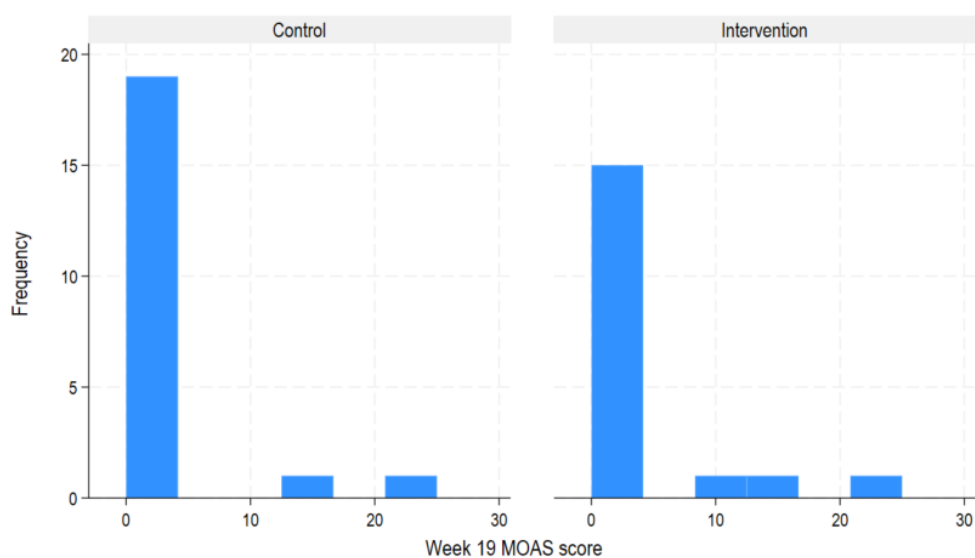


Table 4 – Participant exhibited aggression at week-19 by trial arm

	Intervention	Control	Total
N	18 (46.2%)	21 (53.8%)	39 (100%)
No aggression (MOAS = zero)	11 (61.1%)	14 (66.7%)	25 (64.1%)
Any aggression (MOAS > zero)	7 (38.9%)	7 (33.3%)	14 (35.9%)

MOAS = Modified Overt Aggression Scale.

Table 5 – Logistic regression for exhibiting aggression at week-19

Analysis	n	OR [95% CI]	p-value
Unadjusted	39	1.27 [0.34, 4.73]	0.72
Adjusted	39	1.27 [0.33, 4.86]	0.72

OR = Odds Ratio, CI = Confidence Interval. Adjusted for baseline Modified Overt Aggression Scale score.

Table 6 – Descriptive analysis of change in Modified Overt Aggression Scale score from baseline to week-19 by pre-planned subgroups

Subgroup	Intervention	Control	Total
Overall	0.0 [-1.0, 0.0] N=18	0.0 [-1.0, 0.0] N=21	0.0 [-1.0, 0.0] N=39
Age			
21-29	-0.5 [-2.5, 7.5] N=4	0.0 [-1.0, 0.0] N=5	0.0 [-1.0, 0.0] N=9
30-39	0.0 [0.0, 1.0] N=8	-1.0 [-3.0, 0.0] N=7	0.0 [-2.0, 0.0] N=15
40-49	-0.5 [-1.0, 0.0] N=2	0.0 [-1.0, 13.0] N=6	0.0 [-1.0, 6.5] N=8
50-59	-1.0 [-8.5, -1.0] N=4	0.0 [-4.0, 0.0] N=3	-1.0 [-4.0, 0.0] N=7
Gender			
Female	-7.0 [-16.0, 2.0] N=2	11.0 [2.0, 22.0] N=2	1.0 [-8.0, 12.0] N=4
Male	0.0 [-1.0, 0.0] N=16	0.0 [-2.0, 0.0] N=19	0.0 [-1.0, 0.0] N=35
Ethnicity			
White or British White	0.0 [-1.0, 0.0] N=15	0.0 [-1.0, 0.0] N=13	0.0 [-1.0, 0.0] N=28
Asian or Asian British	N/A N=0	-6.0 [-12.0, 0.0] N=2	-6.0 [-12.0, 0.0] N=2

Black: Caribbean or African	-0.5 [-1.0, 0.0] N=2	-4.0 [-4.0, -4.0] N=1	-1.0 [-4.0, 0.0] N=3
Mixed or multiple ethnicities	-1.0 [-1.0, -1.0] N=1	9.5 [-3.0, 22.0] N=2	-1.0 [-3.0, 22.0] N=3
Other ethnicity	N/A N=0	0.0 [-2.0, 0.0] N=3	0.0 [-2.0, 0.0] N=3
Primary mental health diagnosis*			
None	0.0 [-1.0, 25.0] N=3	0.0 [0.0, 0.0] N=1	0.0 [-0.5, 12.5] N=4
Schizophrenia	-1.0 [-1.0, 0.0] N=5	0.0 [-3.0, 0.0] N=8	0.0 [-2.0, 0.0] N=13
Personality disorder	0.0 [0.0, 0.0] N=5	0.0 [-1.0, 13.0] N=6	0.0 [-1.0, 2.0] N=11
Intellectual development disorder	-1.0 [-2.5, 7.0] N=4	-1.0 [-1.0, 0.0] N=3	-1.0 [-1.0, 0.0] N=7
Other	0.0 [0.0, 0.0] N=1	-1.0 [-4.0, 0.0] N=3	-0.5 [-2.5, 0.0] N=4
Therapy responsiveness (all participants) **			
Responders (improvement)	25.0 [25.0, 25.0] N=1	22.0 [22.0, 22.0] N=1	23.5 [22.0, 25.0] N=2
Deteriorators (worsen)	-37.0 [-37.0, -37.0] N=1	N/A N=0	-37.0 [-37.0, -37.0] N=1
Neutral (no reliable change)	0.0 [-1.0, 0.0] N=16	0.0 [-1.5, 0.0] N=20	0.0 [-1.0, 0.0] N=36
Therapy responsiveness (therapy completers only) **			

Responders (improvement)	N/A N=0	N/A	N/A N=0
Deteriorators (worsen)	-37 [-37, -37] N=1	N/A	-37 [-37, -37] N=1
Neutral (no reliable change)	0.0 [-1.0, 0.0] N=11	N/A	0.0 [-1.0, 0.0] N=11

*Re-categorised primary mental health diagnosis due to low cell counts. ** Participants were classified as responders, deteriorators, or neutral based on reliable change in MOAS scores, calculated following Christensen and Mendoza (1986) [1].

Table 7 – Therapy response in terms of Modified Overt Aggression Scale score from baseline to week 19

RCI	Intervention (all participants)	Intervention (therapy completers)	Control
N	18	12	21
Responders (improvement)	1 (5.6%)	0 (0.0%)	1 (4.8%)
Deteriorators (worsen)	1 (5.6%)	1 (8.3%)	0 (0.0%)
Neutral (no reliable change)	16 (88.9%)	11 (91.7%)	20 (95.2%)

Sensitivity Analyses

Table 8 – Logistic regression for exhibiting aggression at week-19 with bootstrapped confidence intervals

Analysis	n	OR [95% CI]	p-value
Unadjusted	39	1.27 [0.30, 5.45]	0.75
Adjusted	39	1.27 [0.27, 5.95]	0.76

OR = Odds Ratio, CI = Confidence Interval. Adjusted for baseline Modified Overt Aggression Scale score.

Missing data

Table 9 – Logistic regression for exhibiting aggression at week-19 after multiple imputation using predictive mean matching in chained equations

Analysis	n	OR [95% CI]	p-value
Unadjusted	47	1.36 [0.37, 4.91]	0.64

Adjusted	47	1.37 [0.37, 5.09]	0.64
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OR = Odds ratio, CI = Confidence interval. Adjusted for baseline Modified Overt Aggression Scale.

Table 10 – Logistic regression for exhibiting aggression at week-19 excluding out of window Modified Overt Aggression Scale assessments

Analysis	n	OR [95% CI]	p-value
Unadjusted	31	1.63 [0.36, 7.43]	0.53
Adjusted	31	1.59 [0.33, 7.72]	0.57

OR = Odds ratio, CI = Confidence interval. Adjusted for baseline Modified Overt Aggression Scale.

Secondary Outcome Analysis

Table 11 – Descriptive summary of secondary outcome data

	Intervention	Control	Total
N	24 (51.1%)	23 (48.9%)	47 (100.0%)
Week 19 MOAS score	0.0 [0.0, 3.0] N=18	0.0 [0.0, 1.0] N=21	0.0 [0.0, 1.0] N=39
Week 19 BSI primary symptom dimensions	N=19	N=18	N=37
Somatization	0.8 (0.8)	0.6 (1.0)	0.7 (0.9)
Obsession compulsion	1.0 (0.9)	1.0 (1.0)	1.0 (1.0)
Interpersonal sensitivity	1.1 (1.1)	0.5 (0.9)	0.8 (1.0)
Depression	0.8 (0.8)	0.9 (1.2)	0.9 (1.0)
Anxiety	0.9 (1.0)	0.8 (1.0)	0.8 (1.0)
Hostility	0.9 (0.8)	0.7 (1.2)	0.8 (1.0)
Phobic anxiety	0.8 (0.7)	0.6 (0.8)	0.7 (0.8)
Paranoid ideation	0.9 (0.9)	0.9 (1.1)	0.9 (1.0)
Psychoticism	0.6 (0.8)	0.8 (1.0)	0.7 (0.9)
Week 19 Global Severity Index (GSI)	0.8 (0.7) N=19	0.8 (0.9) N=18	0.8 (0.8) N=37
Week 19 Positive Symptom Total (PST)	20.7 (15.7) N=19	16.6 (16.4) N=18	18.7 (16.0) N=37

Week 19 BSI PSDI score	1.8 [1.6, 2.5] N=19	1.8 [1.3, 2.7] N=18	1.8 [1.5, 2.5] N=37
Change in BSI PSDI score from baseline to week-19	-0.3 [-0.5, 0.3] N=18	-0.0 [-0.4, 0.3] N=16	-0.1 [-0.4, 0.3] N=34
Week 19 EQ5D-3L adapted version	0.9 [0.8, 1.0] N=17	1.0 [0.9, 1.0] N=16	0.9 [0.8, 1.0] N=33
Week 19 EQ5D-3L adapted version: VAS	8.0 [6.0, 9.0] N=17	6.5 [4.0, 9.0] N=16	7.0 [5.0, 9.0] N=33
Week 19 EQ5D-3L proxy	0.8 [0.8, 1.0] N=19	0.9 [0.8, 1.0] N=20	0.9 [0.8, 1.0] N=39
Week 19 EQ5D-3L proxy: VAS	75.0 [60.0, 90.0] N=19	80.0 [70.0, 90.0] N=20	80.0 [70.0, 90.0] N=39
Week 19 EQ5D-3L self-report	0.9 [0.9, 1.0] N=2	1.0 [1.0, 1.0] N=2	1.0 [0.9, 1.0] N=4
Week 19 EQ5D-3L self-report: VAS	67.5 [50.0, 85.0] N=2	95.0 [90.0, 100.0] N=2	87.5 [67.5, 95.0] N=4
Week 19 ReQoL-10 proxy	27.3 (6.6) N=19	29.6 (7.9) N=20	28.5 (7.3) N=39
Week 19 ReQoL-10 self-report	27.9 (5.3) N=19	28.4 (6.3) N=18	28.2 (5.8) N=37
Week 38 MOAS score	0.0 [0.0, 3.0] N=15	0.0 [0.0, 2.5] N=16	0.0 [0.0, 3.0] N=31
Change in MOAS score from baseline to week-38	0.0 [-1.0, 0.0] N=15	0.0 [-1.0, 0.0] N=16	0.0 [-1.0, 0.0] N=31
Week 38 BSI primary symptom dimensions	N=16	N=18	N=34
Somatization	0.8 (0.9)	0.6 (0.9)	0.7 (0.9)
Obsession compulsion	1.0 (0.9)	0.9 (1.1)	1.0 (1.0)
Interpersonal sensitivity	1.1 (1.1)	0.9 (1.1)	1.0 (1.1)

Depression	0.8 (1.0)	0.7 (0.9)	0.8 (0.9)
Anxiety	0.8 (0.8)	0.9 (1.1)	0.9 (1.0)
Hostility	0.9 (0.9)	0.7 (1.0)	0.8 (0.9)
Phobic anxiety	0.8 (1.0)	0.8 (1.2)	0.8 (1.1)
Paranoid ideation	1.2 (1.0)	1.0 (1.1)	1.1 (1.0)
Psychoticism	0.7 (0.7)	1.0 (1.1)	0.9 (0.9)
Week 38 Global Severity Index (GSI)	0.9 (0.8) N=16	0.8 (0.9) N=18	0.9 (0.8) N=34
Week 38 Positive Symptom Total (PST)	21.8 (16.6) N=16	17.8 (16.7) N=18	19.7 (16.5) N=34
Week 38 BSI PSDI score	2.0 (0.7) N=15	2.1 (0.8) N=15	2.0 (0.7) N=30
Change in BSI PSDI score from baseline to week-38	-0.3 [-0.7, 0.3] N=15	-0.1 [-0.2, 0.3] N=14	-0.1 [-0.4, 0.3] N=29
Week 38 EQ5D-3L self-report	0.9 [0.9, 1.0] N=2	0.9 [0.9, 1.0] N=2	0.9 [0.9, 1.0] N=4
Week 38 EQ5D-3L self-report: VAS	45.0 [40.0, 50.0] N=2	87.5 [80.0, 95.0] N=2	65.0 [45.0, 87.5] N=4
Week 38 EQ5D-3L proxy	0.9 [0.8, 1.0] N=16	0.9 [0.8, 1.0] N=18	0.9 [0.8, 1.0] N=34
Week 38 EQ5D-3L proxy: VAS	72.5 [55.0, 80.0] N=16	66.5 [60.0, 87.0] N=18	69.0 [60.0, 80.0] N=34
Week 38 EQ5D-3L adapted version	0.9 [0.9, 1.0] N=14	1.0 [0.7, 1.0] N=16	1.0 [0.8, 1.0] N=30
Week 38 EQ5D-3L adapted version: VAS	8.0 [7.0, 10.0] N=14	8.0 [5.0, 10.0] N=16	8.0 [7.0, 10.0] N=30
Week 38 ReQoL-10 proxy	26.4 (6.8) N=16	26.3 (7.5) N=18	26.4 (7.1) N=34

	27.8 (7.7)	27.5 (9.6)	27.6 (8.7)
Week 38 ReQoL-10 self-report	N=16	N=18	N=34

MOAS = Modified Overt Aggression Scale. EQ-5D-3L self-reported using LD (learning disabilities) adapted version. ReQoL-10 Self-Report version completed by a proxy. BSI PSDI = Brief Symptom Inventory Positive Symptom Distress Index.

Figure 6 – Median Modified Overt Aggression Scale scores overtime by trial arm

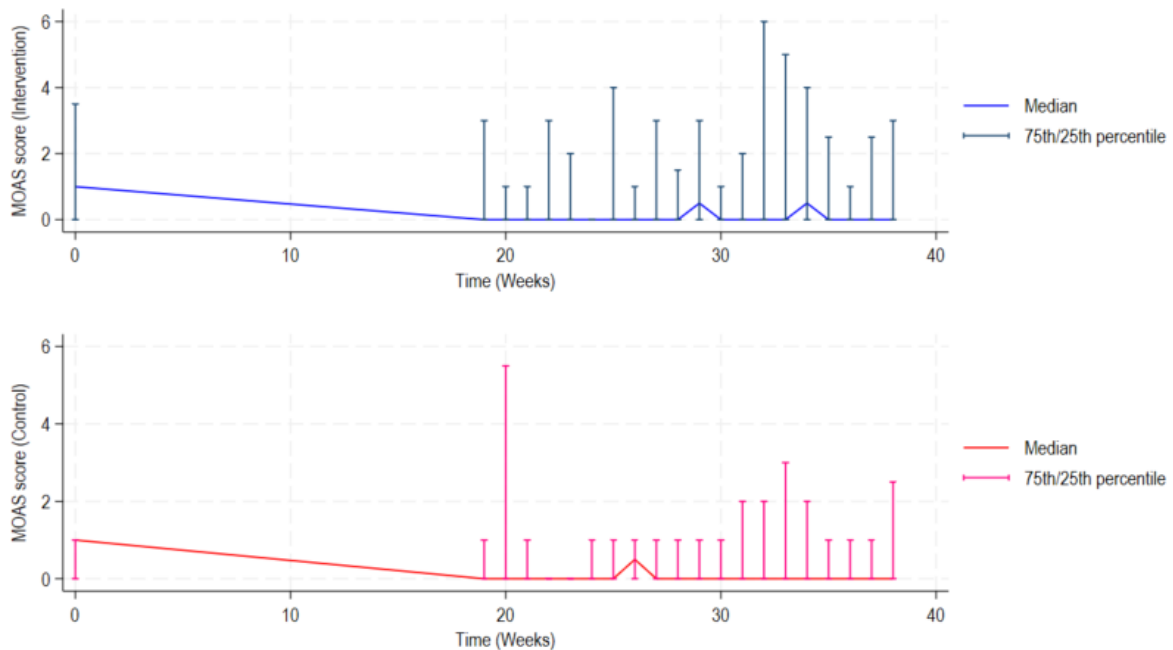
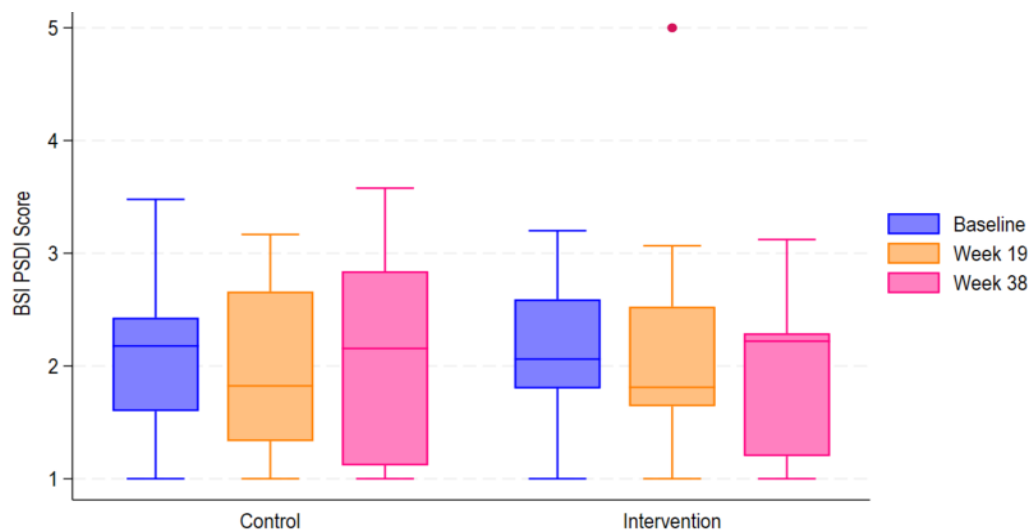


Figure 7 – Brief Symptom Index Positive Symptom Distress Index scores overtime by trial arm



Participant adherence

Table 13 – Week 19 follow-up

	Intervention	Control	Total
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N	24 (51.1%)	23 (48.9%)	47 (100.0%)
Received the SCHEMA interpersonal art psychotherapy			
No	2 (8.3%)	23 (100.0%)	25 (53.2%)
Yes	22 (91.7%)	0 (0.0%)	22 (46.8%)
If not, why (intervention arm)			
Participant was too unwell to start therapy	1 (50.0%)	N/A	1 (50.0%)
withdrawn after randomisation	1 (50.0%)	N/A	1 (50.0%)
Time to therapy (weeks)	3.1 (1.1) N=22	N/A	3.1 (1.1) N=22
Weeks participant attended art therapy	10.1 (5.5) N=24	N/A	10.1 (5.5) N=24
Number of appointments attended	8.5 (4.6) N=24	N/A	8.5 (4.6) N=24
Missed sessions			
No	9 (37.5%)	N/A	9 (37.5%)
Yes	15 (62.5%)	N/A	15 (62.5%)
If yes, why			
Participant was too tired	2 (13.3%)	N/A	2 (13.3%)
Participant declined to attend	3 (20.0%)	N/A	3 (20.0%)
Participant withdrew	2 (13.3%)	N/A	2 (13.3%)
Did not receive intervention	2 (13.3%)	N/A	2 (13.3%)
Participant too unwell	2 (13.3%)	N/A	2 (13.3%)
Session offered at a different time due to meetings	1 (6.7%)	N/A	1 (6.7%)
Participant declined/too tired	1 (6.7%)	N/A	1 (6.7%)
Participant too tired/forgetting/not feeling like it	1 (6.7%)	N/A	1 (6.7%)
Clinical activity on the ward, room booking issue, participant declined	1 (6.7%)	N/A	1 (6.7%)

Number of components covered			
0	3 (12.5%)	N/A	3 (12.5%)
1	1 (4.2%)	N/A	1 (4.2%)
2	2 (8.3%)	N/A	2 (8.3%)
3	2 (8.3%)	N/A	2 (8.3%)
4	4 (16.7%)	N/A	4 (16.7%)
5	4 (16.7%)	N/A	4 (16.7%)
6	0 (0.0%)	N/A	0 (0.0%)
7	8 (33.3%)	N/A	8 (33.3%)
Adherent (5 out of 7 components covered)			
Yes	12 (50.0%)	N/A	12 (50.0%)
No	12 (50.0%)	N/A	12 (50.0%)
Were the following components covered:			
Personal Goals			
No	4 (16.7%)	N/A	27 (57.4%)
Yes	20 (83.3%)	N/A	20 (42.6%)
Coping Responses			
No	4 (16.7%)	N/A	27 (57.4%)
Yes	20 (83.3%)	N/A	20 (42.6%)
Relationships			
No	5 (20.8%)	N/A	28 (59.6%)
Yes	19 (79.2%)	N/A	19 (40.4%)
Personal Events			
No	8 (33.3%)	N/A	31 (66.0%)
Yes	16 (66.7%)	N/A	16 (34.0%)
Themes [Shared Understanding]			
No	12 (50.0%)	N/A	35 (74.5%)

Yes	12 (50.0%)	N/A	12 (25.5%)
Imagined Future			
No	16 (66.7%)	N/A	39 (83.0%)
Yes	8 (33.3%)	N/A	8 (17.0%)
Review and Close			
No	16 (66.7%)	N/A	39 (83.0%)
Yes	8 (33.3%)	N/A	8 (17.0%)
Over the past 19 weeks, has the participant received any other treatment			
No	1 (4.2%)	0 (0.0%)	1 (2.1%)
Yes	18 (75.0%)	22 (95.7%)	40 (85.1%)
Missing	5 (20.8%)	1 (4.3%)	6 (12.8%)
Treatment received:			
Psychologically Informed Treatments			
No	11 (45.8%)	9 (39.1%)	20 (42.6%)
Yes	8 (33.3%)	13 (56.5%)	21 (44.7%)
Missing	5 (20.8%)	1 (4.3%)	6 (12.8%)
Offence Related Treatment			
No	19 (79.2%)	21 (91.3%)	40 (85.1%)
Yes	0 (0.0%)	1 (4.3%)	1 (2.1%)
Missing	5 (20.8%)	1 (4.3%)	6 (12.8%)
Psychoeducational/Occupational/Education			
No	10 (41.7%)	7 (30.4%)	17 (36.2%)
Yes	9 (37.5%)	15 (65.2%)	24 (51.1%)
Missing	5 (20.8%)	1 (4.3%)	6 (12.8%)
Social Activities			
No	3 (12.5%)	11 (47.8%)	14 (29.8%)
Yes	16 (66.7%)	11 (47.8%)	27 (57.4%)

Missing	5 (20.8%)	1 (4.3%)	6 (12.8%)
Physical Activities			
No	6 (25.0%)	10 (43.5%)	16 (34.0%)
Yes	13 (54.2%)	12 (52.2%)	25 (53.2%)
Missing	5 (20.8%)	1 (4.3%)	6 (12.8%)
Educational/Occupational			
No	8 (33.3%)	8 (34.8%)	16 (34.0%)
Yes	11 (45.8%)	14 (60.9%)	25 (53.2%)
Missing	5 (20.8%)	1 (4.3%)	6 (12.8%)
Other type of treatment/therapy received	1 (4.2%)	2 (8.7%)	3 (6.4%)
Art activity group	1 (100.0%)	0 (0.0%)	1 (33.3%)
Drama Therapy	0 (0.0%)	1 (50.0%)	1 (33.3%)
Drama Therapy; music therapy	0 (0.0%)	1 (50.0%)	1 (33.3%)

Resource use

Table 14 – Week 19 resource use

	Intervention	Control	Total
N	24 (51.1%)	23 (48.9%)	47 (100.0%)
Received at least one medication	17 (70.8%)	18 (78.3%)	35 (74.5%)
Total number of medications	11.0 [8.0, 12.0] N=17	10.0 [4.0, 14.0] N=18	10.0 [5.0, 14.0] N=35
Attended a low security special hospital	9 (37.5%)	9 (39.1%)	18 (38.3%)
Total number of inpatient days	133.0 [133.0, 133.0] N=9	134.0 [133.0, 134.0] N=9	133.0 [133.0, 134.0] N=18
Attended a medium security special hospital	10 (41.7%)	11 (47.8%)	21 (44.7%)
Total number of inpatient days	133.0 [87.0, 133.0] N=10	134.0 [133.0, 139.0] N=11	133.0 [133.0, 134.0] N=21

Attended a high security special hospital	4 (16.7%)	3 (13.0%)	7 (14.9%)
Total number of inpatient days	129.5 [123.5, 132.5] N=4	133.0 [133.0, 133.0] N=3	133.0 [127.0, 133.0] N=7
Attended a Specialist Assessment and Treatment Unit	1 (4.2%)	2 (8.7%)	3 (6.4%)
Total number of inpatient days	133.0 [133.0, 133.0] N=1	116.0 [99.0, 133.0] N=2	133.0 [99.0, 133.0] N=3
Attended a Rehabilitation Ward/Facility	1 (4.2%)	0 (0.0%)	1 (2.1%)
Total number of inpatient days	2.0 [2.0, 2.0] N=1	N/A N=0	2.0 [2.0, 2.0] N=1
Attended a General Medical Ward for elective purpose	1 (4.2%)	0 (0.0%)	1 (2.1%)
Total number of inpatient days	0.0 [0.0, 0.0] N=1	N/A N=0	0.0 [0.0, 0.0] N=1
Attended a General Medical Ward for emergency purposes	1 (4.2%)	1 (4.3%)	2 (4.3%)
Total number of inpatient days	3.0 [3.0, 3.0] N=1	N/A Missing	3.0 [3.0, 3.0] N=1
A&E visit	1 (4.2%)	3 (13.0%)	4 (8.5%)
Number of A&E visits	1.0 [1.0, 1.0] N=1	1.0 [1.0, 2.0] N=3	1.0 [1.0, 1.5] N=4
Social worker visit	15 (62.5%)	10 (43.5%)	25 (53.2%)
Number of 1-to-1 social worker visits	2.0 [1.0, 6.0] N=14	2.5 [1.0, 6.0] N=10	2.0 [1.0, 6.0] N=24
Number of group social worker visits	2.0 [2.0, 2.0] N=1	2.0 [1.0, 3.0] N=2	2.0 [1.0, 3.0] N=3
Occupational therapist (OT) visit	18 (75.0%)	21 (91.3%)	39 (83.0%)
Number of 1-to-1 OT visits	2.0 [1.0, 7.0]	3.0 [3.0, 7.0]	3.0 [2.0, 7.0]

	N=13	N=17	N=30
Number of group OT visits	7.0 [2.0, 12.0] N=14	4.0 [2.0, 17.0] N=15	6.0 [2.0, 14.0] N=29
Physiotherapist visit	3 (12.5%)	5 (21.7%)	8 (17.0%)
Number of 1-to-1 physio visits	4.0 [4.0, 10.0] N=3	2.0 [1.0, 6.0] N=3	4.0 [2.0, 6.0] N=6
Number of group physio visits	N/A N=0	12.0 [2.0, 22.0] N=2	12.0 [2.0, 22.0] N=2
Dietician visit	7 (29.2%)	10 (43.5%)	17 (36.2%)
Number of 1-to-1 dietician visits	4.0 [3.0, 4.0] N=7	2.5 [1.0, 4.0] N=10	3.0 [2.0, 4.0] N=17
Number of group dietician visits	N/A N=0	N/A N=0	N/A N=0
Dentist visit	10 (41.7%)	10 (43.5%)	20 (42.6%)
Number of dentist visits	3.0 [1.0, 5.0] N=10	1.0 [1.0, 1.0] N=10	1.0 [1.0, 3.0] N=20
Optician visit	3 (12.5%)	9 (39.1%)	12 (25.5%)
Number of optician visits	1.0 [1.0, 2.0] N=3	1.0 [1.0, 1.0] N=9	1.0 [1.0, 1.0] N=12
Primary care visit	11 (45.8%)	9 (39.1%)	20 (42.6%)
Number of nurse visits (primary care)	4.0 [1.0, 13.0] N=6	7.0 [2.0, 7.0] N=5	6.0 [1.0, 13.0] N=11
Number of GP visits (primary care)	2.0 [1.0, 3.0] N=8	1.0 [1.0, 1.0] N=7	1.0 [1.0, 2.0] N=15
Number of pharmacist visits (primary care)	2.5 [1.0, 4.0] N=2	N/A N=0	2.5 [1.0, 4.0] N=2
Diagnostic tests received	12 (50.0%)	19 (82.6%)	31 (66.0%)
Number of X-rays	1.0 [1.0, 4.0]	1.0 [1.0, 1.0]	1.0 [1.0, 1.0]

	N=3	N=3	N=6
Number of CT scans	2.0 [2.0, 2.0] N=1	1.0 [1.0, 1.0] N=1	1.5 [1.0, 2.0] N=2
Number of ECGs	1.0 [1.0, 1.0] N=5	1.0 [1.0, 1.0] N=10	1.0 [1.0, 1.0] N=15
Number of EEGs	N/A N=0	1.0 [1.0, 1.0] N=1	1.0 [1.0, 1.0] N=1
Number of ultrasounds	1.0 [1.0, 1.0] N=2	1.0 [1.0, 1.0] N=2	1.0 [1.0, 1.0] N=4
Number of urine tests	1.5 [1.0, 3.0] N=4	2.0 [2.0, 3.0] N=9	2.0 [1.0, 3.0] N=13
Number of blood tests	2.0 [1.0, 3.0] N=9	2.5 [1.0, 5.0] N=16	2.0 [1.0, 3.0] N=25
Ambulance required	0 (0.0%)	1 (4.3%)	1 (2.1%)
Number of ambulance uses	N/A N=0	2.0 [2.0, 2.0] N=1	2.0 [2.0, 2.0] N=1
Criminal justice contact	1 (4.2%)	2 (8.7%)	3 (6.4%)
Police contact (emergency)	0 (0.0%)	1 (4.3%)	1 (2.1%)
Number of emergency police contacts	N/A N=0	1.0 [1.0, 1.0] N=1	1.0 [1.0, 1.0] N=1

A&E = Accident and Emergency, OT = Occupational Therapist, GP = General Practice, CT scan = Computed Tomography scan, ECG = Electrocardiogram, EEG = Electroencephalogram, N/A = Not Applicable.

Subgroup Analysis – Analysis of Reliable Change

Table 15 – Therapy response in terms of Brief Symptom Index Positive Symptom Distress Index score from baseline to week 19

RCI	Intervention (all participants)	Intervention (therapy completers)	Control
N	18	11	16
Responders (improvement)	1 (5.6%)	0 (0.0%)	0 (0.0%)
Deteriorators (worsen)	0 (0.0%)	1 (9.1%)	1 (6.3%)

Neutral (no reliable change)	17 (94.4%)	10 (90.9%)	15 (93.7%)
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Therapy completers = 11 as 1 participant is missing Brief Symptom Index Positive Symptom Distress Index.

Harms/Safety Analyses

Table S19 – Adverse Events

	Intervention	Control	Total
N	24 (51.1%)	23 (48.9%)	47 (100.0%)
Experienced an AE	10 (41.7%)	5 (21.7%)	15 (31.9%)
Number of AEs	440 (58.7%)	309 (41.3%)	749 (100%)
Number of AEs per participant	13.5 [5, 85]	67 [8, 82]	16 [7, 85]
Changes in behaviour*	9 (90%)	4 (80%)	13 (86.67%)
Insomnia*	1 (10%)	1 (20%)	2 (13.33%)
Dizziness*	2 (20%)	1 (20%)	3 (20.00%)
Headache*	4 (40%)	3 (60%)	7 (46.67%)
Fatigue*	0 (0%)	1 (20%)	1 (6.67%)
Other AE*	8 (80%)	3 (60%)	11 (73.33%)
Change in participant's condition*	1 (10%)	2 (40%)	3 (20.00%)
Does the clinician think it's in the best interest to withdraw the patient from the trial? *	0 (0%)	0 (0%)	0 (0%)

AE = Adverse Event. *Denominator: those who experienced an adverse event

Table S20 – Serious Adverse Events

	Intervention	Control	Total
N	24	23	47
Experienced an SAE	4 (16.67%)	4 (17.39%)	8 (17.02%)
Number of SAEs	17 (29.3%)	41 (70.7%)	58 (100.0%)
Number of SAEs per participant	2 [2, 6.5]	2.5 [1, 19.5]	2 [1.5, 7.5]
Why was the event serious? *			

Life-threatening	1.0 (5.9%)	2.0 (4.9%)	3.0 (5.2%)
hospitalisation/prolongation of hospitalisation	0.0 (0.0%)	1.0 (2.4%)	1.0 (1.7%)
Other medically important condition	0.0 (0.0%)	1.0 (2.4%)	1.0 (1.7%)
Self-harm	16.0 (94.1%)	37.0 (90.2%)	53.0 (91.4%)
Reasonable possibility the SAE may have been caused by art psychotherapy*			
No	17.0 (100.0%)	41.0 (100.0%)	58.0 (100.0%)
Reasonable possibility the SAE may have been caused by usual care*			
No	4.0 (23.5%)	1.0 (2.4%)	5.0 (8.6%)
Yes	13.0 (76.5%)	40.0 (97.6%)	53.0 (91.4%)
Related to concomitant medication*			
No	17.0 (100.0%)	41.0 (100.0%)	58.0 (100.0%)
Caused by a preexisting medical condition*			
No	16.0 (94.1%)	41.0 (100.0%)	57.0 (98.3%)
Yes	1.0 (5.9%)	0.0 (0.0%)	1.0 (1.7%)
Other cause*			
No	11.0 (64.7%)	37.0 (90.2%)	48.0 (82.8%)
Yes	6.0 (35.3%)	4.0 (9.8%)	10.0 (17.2%)
Caused by an interaction between the intervention and medical procedure/concomitant medication*			
No	17.0 (100.0%)	41.0 (100.0%)	58.0 (100.0%)

SAE = Serious Adverse Event. *Denominator: total number of serious adverse events reported.

