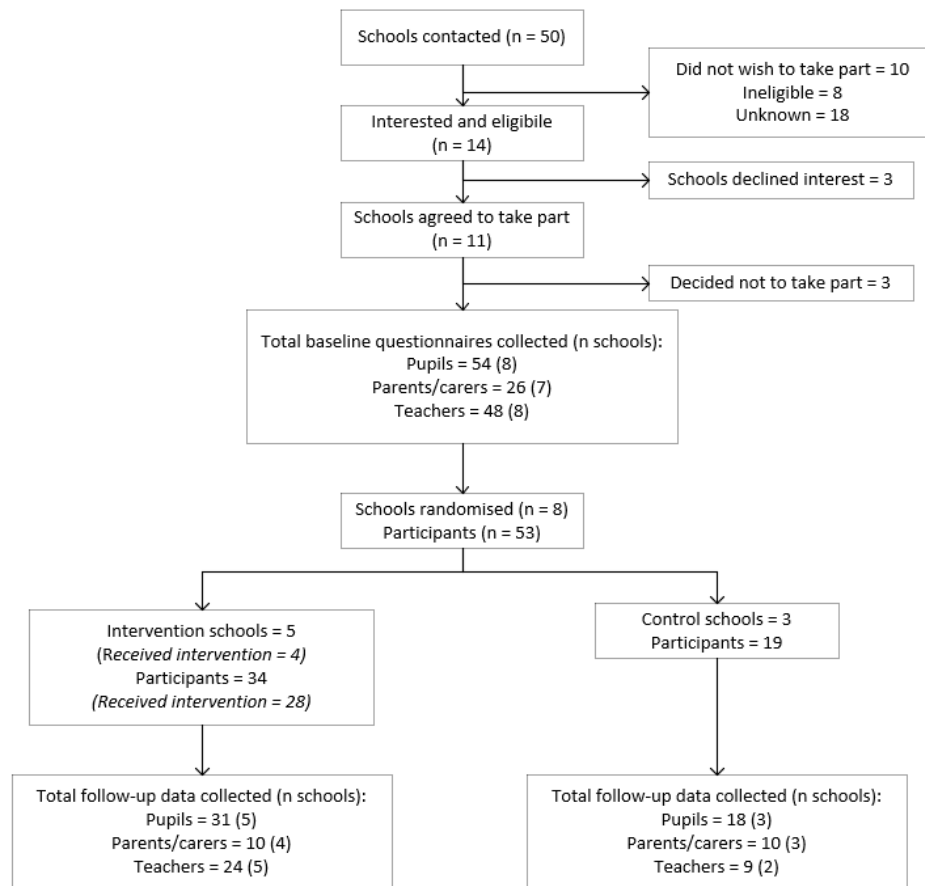


Participant Flow:



Baseline Characteristics:

Table 1: Baseline demographic data from teacher questionnaire

Variable	Control (n = 15)	Intervention (n = 33)	Total (n = 48)
School year			
Year 3	0 (0%)	1 (3%)	1 (2%)
Year 4	1 (7%)	4 (12%)	5 (10%)
Year 5	7 (47%)	7 (21%)	14 (29%)
Year 6	7 (47%)	13 (39%)	20 (42%)
Year 7	0 (0%)	8 (24%)	8 (17%)
What is the child's primary need?			
Autism spectrum disorder (ASD)	9 (60%)	21 (64%)	30 (63%)
Moderate learning difficulties (MLD)	4 (27%)	4 (12%)	8 (17%)
Severe learning difficulties (SLD)	0 (0%)	5 (15%)	5 (10%)
Profound and multiple learning difficulties	0 (0%)	1 (3%)	1 (2%)
Behaviour	2 (13%)	0 (0%)	2 (4%)
Complex medical needs	0 (0%)	1 (3%)	1 (2%)
Visual and hearing impairment	0 (0%)	1 (3%)	1 (2%)
What is the child's secondary need?			
Autism spectrum disorder (ASD)	1 (7%)	4 (12%)	5 (10%)
Moderate learning difficulties (MLD)	6 (40%)	15 (45%)	21 (44%)
Severe learning difficulties (SLD)	0 (0%)	1 (3%)	1 (2%)
Profound and multiple learning difficulties	0 (0%)	1 (3%)	1 (2%)
Medical needs	0 (0%)	1 (3%)	1 (2%)
Physical and medical	0 (0%)	1 (3%)	1 (2%)
Developmental delay	0 (0%)	1 (3%)	1 (2%)
No secondary need recorded	8 (53%)	9 (27%)	17 (35%)
Is the child eligible for Free School Meals?			
Yes	7 (47%)	7 (21%)	14 (29%)
No	8 (53%)	16 (48%)	24 (50%)
Not known	0 (0%)	10 (30%)	10 (21%)

Table 2: Baseline demographic data from parent/carer questionnaire

Variable	Control (n = 11)	Intervention (n = 15)	Total (n = 26)
Age of child			
8 years	1 (9%)	1 (7%)	2 (8%)
9 years	5 (45%)	9 (60%)	14 (54%)
10 years	5 (45%)	2 (13%)	7 (27%)

11 years	0 (0%)	3 (20%)	3 (12%)
Mean (SD), years	9.9 (0.6)	10.0 (1.0)	10.0 (0.8)
Median (IQR), years	9.9 (9.5, 10.3)	9.6 (9.4, 10.7)	9.8 (9.5, 10.5)
Gender of child			
Male	8 (73%)	14 (93%)	22 (85%)
Female	3 (27%)	1 (7%)	4 (15%)
Ethnicity of child			
White British	9 (82%)	10 (67%)	19 (73%)
White Other	1 (9%)	1 (7%)	2 (8%)
Asian/Asian British: Bangladeshi	0 (0%)	1 (7%)	1 (4%)
Black/Black British: African	1 (9%)	0 (0%)	1 (4%)
British/Asian	0 (0%)	1 (7%)	1 (4%)
British/Turkish	0 (0%)	1 (7%)	1 (4%)
White/black Caribbean	0 (0%)	1 (7%)	1 (4%)
Current living situation			
Family home (with birth parents)	11 (100%)	13 (87%)	24 (92%)
Family home (with one parent)	0 (0%)	1 (7%)	1 (4%)
Lives with grandparents with SGO	0 (0%)	1 (7%)	1 (4%)
What is your child's primary need?			
Autism spectrum disorder (ASD)	7 (64%)	5 (36%)	12 (48%)
Moderate learning difficulties (MLD)	3 (27%)	2 (14%)	5 (20%)
Severe learning difficulties	0 (0%)	3 (21%)	3 (12%)
ADHD	0 (0%)	1 (7%)	1 (4%)
Special educational plan	0 (0%)	1 (7%)	1 (4%)
Behaviour	1 (9%)	0 (0%)	1 (4%)
Cerebral palsy and global development delay	0 (0%)	1 (7%)	1 (4%)
Unknown	0 (0%)	1 (7%)	1 (4%)
<i>Missing</i>	<i>0 (0%)</i>	<i>1 (7%)</i>	<i>1 (4%)</i>
Genetic syndrome			
Down Syndrome	0 (0%)	1 (9%)	1 (6%)
10Q26 Deletion	0 (0%)	1 (9%)	1 (6%)
Foetal valproate syndrome	0 (0%)	1 (9%)	1 (6%)
Neurofibromatosis type 1	0 (0%)	1 (9%)	1 (6%)
Retinitis Pigmentosa and primary ciliary dyskinesia	0 (0%)	1 (9%)	1 (6%)
SAMS Syndrome	0 (0%)	1 (9%)	1 (6%)
Unknown	7 (100%)	5 (45%)	12 (67%)
<i>Missing</i>	<i>4 (36%)</i>	<i>4 (27%)</i>	<i>8 (31%)</i>
Epilepsy			
Yes	0 (0%)	4 (29%)	4 (17%)
No	10 (100%)	10 (71%)	20 (83%)
<i>Missing</i>	<i>1 (9%)</i>	<i>1 (9%)</i>	<i>2 (8%)</i>
Sensory impairments (vision, hearing)			
Yes	1 (9%)	9 (60%)	10 (38%)
No	10 (91%)	6 (40%)	16 (62%)

Table 3: Teachers completion the baseline questionnaire

Variable	Control (n = 15)	Intervention (n = 33)	Total (n = 48)
Baseline Questionnaire Completed by			
Class Teacher	5 (33%)	33 (100%)	38 (79%)
Deputy Head	5 (33%)	0 (0%)	5 (10%)
Pathway Leader	5 (33%)	0 (0%)	5 (10%)
How long have you known the child? (months)			
12 months or less	6 (40%)	18 (55%)	24 (50%)
More than 12 months	9 (60%)	15 (45%)	24 (50%)
Mean (SD)	22.7 (13.4)	16.3 (20.2)	18.3 (18.5)
Median (IQR)	20.0 (12.0, 29.0)	6.0 (3.0, 24.0)	12.5 (6.0, 25.5)

Outcome Measures:

Outcome	Sample size	Adjusted mean difference* (95% CI)	ICC (95% CI)	Interpretation
EQ5D-Y – Pupils	48	-0.04 (-0.19, 0.11)	0.14 (0.01, 0.73)	Higher scores indicate improved quality of life. No difference between groups.
EQ5D – Parent/carer	12	0.36 (-0.24, 0.97)	Not estimable	Higher scores indicate improved quality of life. No difference between groups.
SDQ – Teacher Emotional problems score	30	-1.49 (-3.32, 0.34)	Not estimable	Lower scores indicate reduced emotional problems No difference between groups.
SDQ – Teacher Conduct problems score	30	-0.56 (-2.61, 1.48)	0.41 (0.07, 0.86)	Lower scores indicate reduced conduct problems No difference between groups.
SDQ – Teacher Hyperactivity score	30	-0.84 (-2.49, 0.81)	Not estimable	Lower scores indicate reduced hyperactivity No difference between groups.
SDQ – Teacher Peer problems score	30	-0.49 (-2.00, 1.02)	Not estimable	Lower scores indicate reduced peer problems No difference between groups.
SDQ – Teacher Prosocial behaviour score	30	0.71 (-1.40, 2.82)	Not estimable	Higher scores indicate improved prosocial behaviour No difference between groups.
SDQ – Teacher Total difficulties score	30	-2.64 (-7.00, 1.73)	Not estimable	Lower scores indicate reduced behavioural difficulties No difference between groups.
SDQ – Parent/carer Emotional problems score	12	1.67 (-3.18, 6.51)	Not estimable	Lower scores indicate reduced emotional problems No difference between groups.
SDQ – Parent/carer Conduct problems score	12	0.47 (-2.10, 3.03)	0.31 (0.00, 0.99)	Lower scores indicate reduced conduct problems No difference between groups.
SDQ – Parent/carer Hyperactivity score	12	-2.00 (-4.91, 0.92)	Not estimable	Lower scores indicate reduced hyperactivity No difference between groups..
SDQ – Parent/carer	12	-1.24 (-3.81, 1.34)	Not estimable	Lower scores indicate

Peer problems score				reduced peer problems No difference between groups.
SDQ – Parent/carer Prosocial behaviour score	12	0.01 (-2.78, 2.80)	Not estimable	Higher scores indicate improved prosocial behaviour No difference between groups..
SDQ – Parent/carer Total difficulties score	12	-6.58 (-17.37, 4.21)	0.30 (0.00, 0.99)	Lower scores indicate reduced behavioural difficulties No difference between groups.
MAMS – Pupils Emotional difficulties	49	-0.46 (-0.03, 0.55)	Not estimable	Lower scores indicate reduced emotional difficulties No difference between groups.
MAMS – Pupils Behavioural difficulties	49	0.06 (-1.64, 1.76)	0.13 (0.01, 0.71)	Lower scores indicate reduced behavioural difficulties No difference between groups.
ELA - Teacher Self-awareness	31	-1.25 (-6.01, 3.51)	0.52 (0.11, 0.91)	Higher scores indicate improved self-awareness No difference between groups..
ELA – Teacher Self- regulation	31	-0.34 (-3.12, 2.45)	Not estimable	Higher scores indicate improved self-regulation No difference between groups..
ELA - Teacher Motivation	31	0.74 (-1.50, 2.97)	Not estimable	Higher scores indicate improved motivation No difference between groups.
ELA - Teacher Empathy	31	1.03 (-1.63, 3.69)	Not estimable	Higher scores indicate improved empathy No difference between groups.
ELA – Teacher Social skills	31	0.95 (-3.63, 5.52)	0.43 (0.06, 0.90)	Higher scores indicate improved social skills No difference between groups.
ELA – Teacher Final score	31	1.66 (-11.52, 14.84)	0.12 (0.00, 0.97)	Higher scores indicate improved emotional literacy No difference between groups.
ELA - Parent/carer Self-awareness	13	-5.12 (-12.47, 2.22)	0.84 (0.33, 0.98)	Higher scores indicate improved self-awareness No difference between groups..
ELA - Parent/carer Self- regulation	13	-3.73 (-9.83, 2.38)	0.28 (0.00, 0.99)	Higher scores indicate improved self-regulation No difference between groups.

ELA - Parent/carers Motivation	13	-0.75 (-11.69, 10.20)	0.76 (0.17, 0.98)	Higher scores indicate improved motivation No difference between groups.
ELA - Parent/carers Empathy	13	-4.70 (-12.39, 3.00)	0.85 (0.39, 0.98)	Higher scores indicate improved empathy No difference between groups.
ELA - parent/carers Social skills	13	-4.44 (-13.82, 4.93)	0.96 (0.75, 0.99)	Higher scores indicate improved social skills No difference between groups.
ELA - Parent/carers Final score	13	-22.08 (-62.42, 18.25)	0.88 (-0.44, 0.98)	Higher scores indicate improved emotional literacy No difference between groups.
CHU – Pupil	49	-0.01 (-0.07, 0.06)	Not estimable	Higher scores indicate improved health No difference between groups.
CHU – Parent/carers	12	0.03 (-0.19, 0.25)	Not estimable	Higher scores indicate improved health No difference between groups.
NCBR – Teacher Positive social – Compliant/calm	31	1.14 (-1.40, 3.68)	Not estimable	Higher scores indicate improved compliant/calm behaviour No difference between groups.
NCBR – Teacher Positive social – Adaptive social	31	-0.20 (-2.51, 2.11)	0.04 (0.00, 1.00)	Higher scores indicate improved adaptive social behaviour No difference between groups.
NCBR – Teacher Conduct problems score	31	-3.14 (-7.80, 1.51)	Not estimable	Lower scores indicate reduced conduct problems No difference between groups.
NCBR – Teacher Insecure/Anxious	31	-5.90 (-11.89, 0.08)	Not estimable	Lower scores indicate reduced insecurity/anxiety No difference between groups.
NCBR – Teacher Hyperactive	31	-2.86 (-8.07, 2.34)	0.02 (0.00, 1.00)	Lower scores indicate reduced hyperactivity No difference between groups.
NCBR – Teacher Self-injurious/ stereotypic	31	-1.24 (-3.88, 1.29)	0.13 (0.00, 0.97)	Lower scores indicate reduced self-injurious/stereotypic behaviour No difference between groups.
NCBR – Teacher	31	-5.14 (-8.85, -1.42)	0.12 (0.00,	Lower scores indicate

Self-isolated/ritualistic			1.00)	reduced self-isolated/ritualistic behaviour For those allocated to the intervention group, there was a reduction in NCBR Self-Isolated/Ritualistic score compared to the control group between baseline and follow-up. A lower score indicates better outcomes.
NCBR – Teacher Irritable	31	-3.71 (-7.04, -0.37)	Not estimable	Lower scores indicate reduced irritable behaviour For those allocated to the intervention group, there was a reduction in NCBR Irritable score compared to the control group between baseline and follow-up. A lower score indicates better outcomes.

Adverse Events:

No serious adverse events were reported during the study period. There was no evidence of harm from the intervention in any of the data collected.