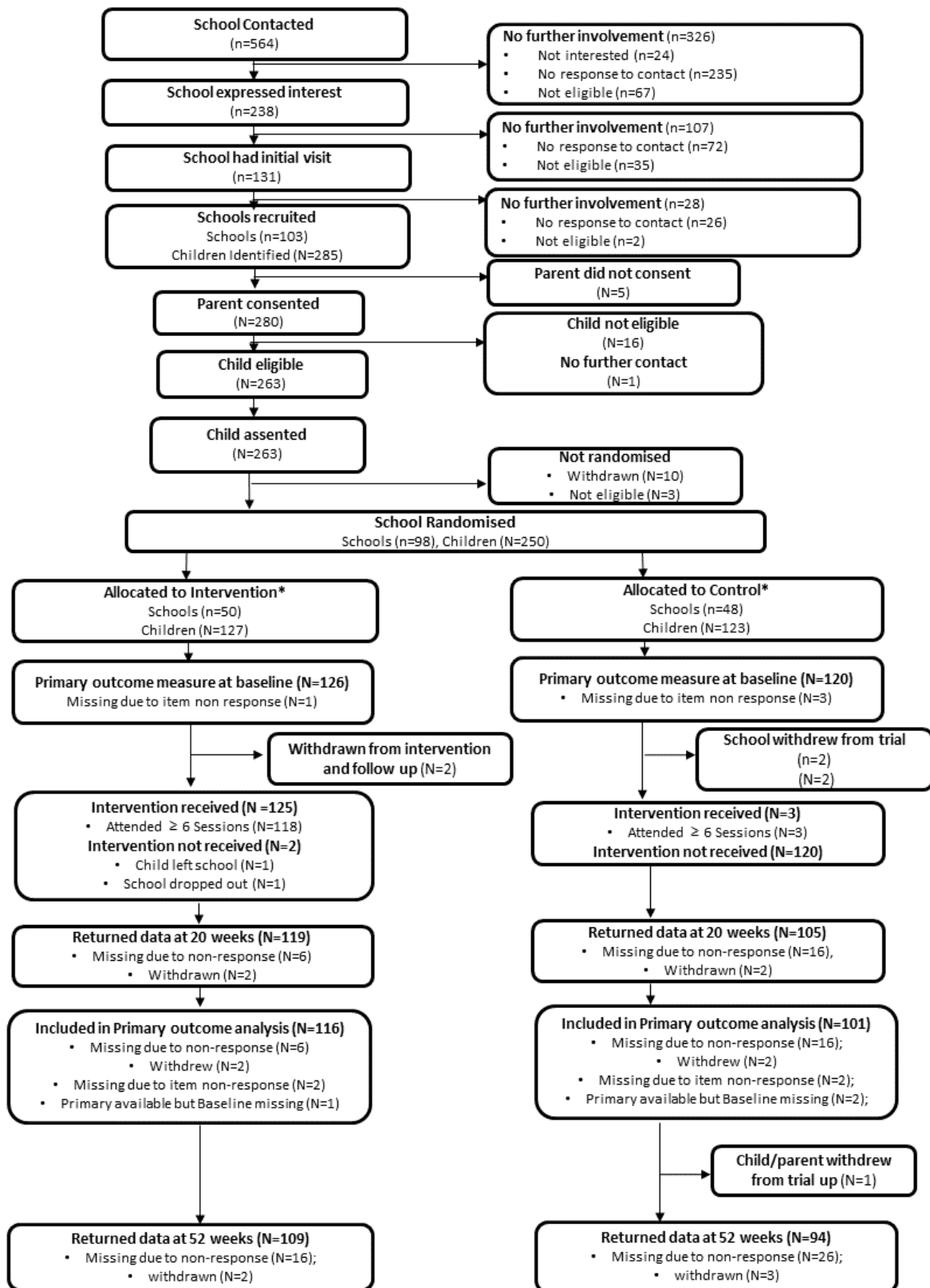


Figure 1: CONSORT Participant flow diagram



\* Following ITT principles, school (n=1) children (n=3) allocated to control, but received intervention are included in the control arm

Table 1: Baseline Characteristics

		Intervention (n=127)	Control (n=123)	All (n=250)
Categorical Variables				
Child's Gender	Male	102 (80%)	92 (75%)	194 (78%)
	Female	25 (20%)	31 (25%)	56 (22%)
Academic age	6	9 (7%)	6 (5%)	15 (6%)
	7	25 (20%)	21 (17%)	46 (18%)
	8	23 (18%)	18 (15%)	41 (16%)
	9	18 (14%)	24 (20%)	42 (17%)
	10	14 (11%)	17 (14%)	31 (12%)
	11	18 (14%)	12 (10%)	30 (12%)
	12	7 (6%)	15 (12%)	22 (9%)
	13	4 (3%)	5 (4%)	9 (4%)
	14	9 (7%)	5 (4%)	14 (6%)
Child's Ethnicity	English / Welsh / Scottish / Northern Irish / British	102 (80%)	107 (87%)	209 (84%)
	Any other White background	3 (2%)	1 (1%)	4 (2%)
	Pakistani	5 (4%)	3 (2%)	8 (3%)
	Bangladeshi	2 (2%)	0 (0%)	2 (1%)
	Any other Asian background	2 (2%)	1 (1%)	3 (1%)
	White and Black Caribbean	2 (2%)	1 (1%)	3 (1%)
	White and Asian	1 (1%)	4 (3%)	5 (2%)
	Any other mixed / multiple ethnic background	1 (1%)	2 (2%)	3 (1%)
	African	3 (2%)	1 (1%)	4 (2%)
	Caribbean	2 (2%)	0 (0%)	2 (1%)
	Arab	1 (1%)	1 (1%)	2 (1%)
	Any other ethnic group	2 (2%)	0 (0%)	2 (1%)
	Prefer not to say	1 (1%)	2 (2%)	3 (1%)
Continuous variables				
Child's age	N (%)	127 (100%)	123 (100%)	250 (100%)
	Mean (SD)	9.6 (2.3)	9.7 (2.1)	9.7 (2.2)
	Median (IQR)	9 (8, 11)	9 (8, 11)	9 (8, 11)
	Min., Max.	7, 15	7, 15	7, 15
SCQ score	N (%)	127 (100%)	123 (100%)	250 (100%)
	Mean (SD)	25.1 (5.2)	24.2 (5.2)	24.7 (5.2)
	Median (IQR)	25 (22, 29)	24 (21, 28)	25 (21, 29)
	Min., Max.	15, 37	15, 36	15, 37
SSiS social skills (teacher)	N (%)	126 (99%)	120 (98%)	246 (98%)
	Mean (SD)	66.1 (19.3)	64.9 (21.4)	65.5 (20.4)
	Median (IQR)	64 (50, 79)	66 (48, 77)	65 (50, 79)
	Min., Max.	29, 117	26, 129	26, 129

## Stratification Variables

		Intervention	Control	All
		(n=127)	(n=123)	(n=250)
School level	Primary	89 (70%)	86 (70%)	175 (70%)
	Secondary	38 (30%)	37 (30%)	75 (30%)
Number of children in school with ASD diagnosis	Less than 6	91 (72%)	92 (75%)	183 (73%)
	Greater than or equal to 6	36 (28%)	31 (25%)	67 (27%)

Table 2: Comparison of mean primary outcome at baseline and 20 weeks by treatment group

		Intervention		Control	
		n	Mean(SD)	n	Mean(SD)
Teacher SSIS Social Skills subscale					
	Baseline	126	66.12 (19.32)	120	64.90 (21.45)
	20 weeks	117	72.93 (18.81)	103	69.78 (20.21)

Table 3: Comparison of mean secondary outcomes at baseline, 20 weeks and 52 weeks by treatment group

		Intervention		Control	
		n	Mean(SD)	n	Mean(SD)
1: Perceived social isolation and loneliness					
Asher loneliness scale	Baseline	109	37.6 (11.7)	103	36.4 (11.7)
	20 weeks	87	37.3 (12.1)	86	37.3 (11.5)
	52 weeks	82	36.0 (11.1)	69	38.6 (10.6)
MSPSS significant other	Baseline	119	5.8 (1.1)	116	5.8 (1.2)
	20 weeks	90	5.8 (1.3)	91	5.8 (1.2)
	52 weeks	90	5.8 (1.4)	78	5.6 (1.2)
2: Sustainability into next academic year					
SSIS social skills (teacher)	Baseline	126	66.1 (19.3)	120	64.9 (21.4)
	52 weeks	107	74.8 (18.0)	93	72.8 (18.5)
3: Academic Competence					
Academic competence	Baseline	122	9.6 (7.3)	121	12.1 (7.6)
	20 weeks	112	10.1 (7.5)	101	12.8 (8.2)
	52 weeks	100	9.7 (7.0)	92	13.1 (7.8)
4: Emotional and behavioural symptoms					
Strengths and difficulties Questionnaire (teacher)	Baseline	127	15.7 (5.9)	123	15.8 (5.8)
	20 weeks	119	14.9 (5.6)	105	14.6 (5.6)
	52 weeks	109	14.1 (6.3)	93	15.2 (6.1)
Strengths and difficulties Questionnaire (parent)	Baseline	127	21.4 (5.4)	123	22.2 (5.3)
	20 weeks	102	20.4 (5.6)	94	21.8 (5.7)
	52 weeks	101	20.5 (5.7)	79	20.6 (5.9)
SSIS problem behaviours (teacher)	Baseline	127	30.7 (12.2)	119	30.6 (13.9)
	20 weeks	119	27.8 (10.8)	104	28.9 (13.4)
	52 weeks	109	27.8 (13.6)	92	29.4 (13.0)
SSIS Problem behaviours (parent)	Baseline	126	48.7 (14.6)	121	49.0 (13.5)
	20 weeks	100	45.6 (13.7)	93	48.3 (12.4)

	52 weeks	101	46.6 (15.3)	79	46.6 (12.4)
5: Assertion, Self-control, Internalising and Externalising					
Assertiveness subscale of SSiS social skills (teacher)	Baseline	126	9.4 (4.2)	120	9.7 (4.4)
	20 weeks	117	10.1 (3.7)	103	10.4 (4.2)
	52 weeks	107	10.8 (3.6)	93	10.9 (4.2)
Self control subscale of SSiS social skills (parent)	Baseline	126	8.7 (4.3)	120	8.2 (4.5)
	20 weeks	117	10.0 (4.3)	103	9.0 (4.6)
	52 weeks	107	10.4 (4.2)	93	8.9 (4.2)
Externalising subscale of SSiS problem behaviours (teacher)	Baseline	127	9.9 (6.7)	119	10.5 (7.7)
	20 weeks	119	8.9 (5.8)	104	9.6 (6.8)
	52 weeks	109	8.7 (6.7)	92	9.7 (6.9)
Internalising subscale of SSiS problem behaviours (teacher)	Baseline	127	8.2 (3.4)	119	8.1 (3.8)
	20 weeks	119	7.6 (3.4)	104	8.2 (3.8)
	52 weeks	109	7.6 (3.9)	92	8.1 (3.7)
Assertiveness subscale of SSiS social skills (parent)	Baseline	127	10.8 (4.0)	121	10.6 (4.1)
	20 weeks	100	11.3 (3.7)	91	10.6 (4.1)
	52 weeks	101	11.1 (3.9)	80	10.8 (4.0)
Self control subscale of SSiS social skills (parent)	Baseline	127	4.6 (3.5)	121	4.1 (3.2)
	20 weeks	100	5.5 (3.5)	91	5.0 (3.1)
	52 weeks	101	5.5 (3.8)	80	4.9 (3.2)
Externalising subscale of SSiS problem behaviours (parent)	Baseline	126	16.8 (6.6)	121	16.6 (6.4)
	20 weeks	100	15.5 (6.3)	93	16.0 (5.7)
	52 weeks	101	15.8 (6.8)	79	15.2 (5.5)
Internalising subscale of SSiS problem behaviours (parent)	Baseline	126	14.4 (6.0)	121	15.4 (5.3)
	20 weeks	100	13.5 (6.0)	93	16.1 (5.5)
	52 weeks	101	13.7 (6.1)	79	15.3 (5.5)
Additional outcome - social skills score reported by parents					
SSiS social skills (parent)	Baseline	127	58.5 (17.1)	121	57.0 (16.9)
	20 weeks	100	63.3 (18.0)	91	59.3 (16.1)
	52 weeks	101	63.6 (19.7)	80	61.5 (16.4)

Table 4: SAEs

	Intervention (n=127)	Control (n=123)	All (n=250)
Number (%) of participants who experienced ≥1 AE	1 (0.8%)	2 (1.6%)	3 (1.2%)
Number of all SAEs (including repeated events)	1	2	3
SAE related to intervention			
Unrelated	1 (100.0%)	2 (100.0%)	3 (100.0%)
Frequency of SAE			
Isolated	1 (100.0%)	2 (100.0%)	3 (100.0%)
Intensity of SAE			
Mild	1 (100.0%)	2 (100.0%)	3 (100.0%)

Seriousness of SAE			
Inpatient hospitalisation	1 (100.0%)	2 (100.0%)	3 (100.0%)
Outcome of SAE			
Recovered	1 (100.0%)	2 (100.0%)	3 (100.0%)