

Data supplement

Table DS1 Family characteristics at baseline^a

	Intervention complete data to follow-up three (<i>n</i> = 79)	Intervention lost to follow-up (<i>n</i> = 25)	Values for UK ³⁸
Lone parent, <i>n</i> (%)	35 (44)	15 (60)	7%
Large family, ≥3 children: <i>n</i> (%)			
Couples	25 (32)	4 (16)	23%
Lone parent	14 (18)	5 (20)	6%
Total weekly household income ≤£64/person, <i>n</i> (%) ^b	71 (90)	22 (88)	17%
Parent age at first-born child, years: mean (s.d.)	21.5 (5.03)	21.2 (4.3)	Mean 27.4
≥2 from 5 risk factors ^c			
<i>n</i> (%)	57 (72)	18 (72)	–
Mean (s.d.)	2.4 (1.33)	2 (1.17)	
≥2 from 6 Socio-Economic Disadvantage score ^d			
<i>n</i> (%)	62 (78)	23 (92)	–
Mean (s.d.)	2.7 (1.37)	3.5 (1.5)	

a. There were no statistical differences between the intervention families and the lost to follow-up intervention families using chi-squared and two sample *t*-test analyses.
b. £257/week/family of four, after housing costs, is classed as low income from 2001 DSS Household Below Average Income survey.³⁹
c. The five risk factors for developing conduct disorder used in this study are: single parenthood, teenage parenthood, parental depression, family poverty, parental history of drug misuse or criminality.⁶
d. The six factors on the Socio-Economic Disadvantage measure⁴⁰ are: unemployment or dependent on benefits, single parenthood, large family size (three or more children), no parental education beyond 16 years, poor quality/overcrowded/insecure housing, living in area of high crime.

Additional references

- 38 Office of National Statistics. *Social Trends*. Office for National Statistics, 2005.
- 39 Department of Work and Pensions. *2001 DSS Household Below Average Income survey*. DWP, 2002 (<http://www.dwp.gov.uk/asd/hbai/hbai2001/contents.asp>).
- 40 Hutchings J. *The Personal and Parental Characteristics of Preschool Children Referred to a Child and Family Mental Health Service and their Relation to Treatment Outcome* (PhD thesis). University of Wales, Bangor, 1996.

Table DS2 Comparison of characteristics of children in the sample at baseline: completers *v.* those lost to the study by follow-up three^a

Demographics	Intervention (<i>n</i> = 79)	Intervention lost to follow-up (<i>n</i> = 25)
Boys, <i>n</i> (%)	44 (56)	12 (48)
Welsh speaking, <i>n</i> (%)	8 (10)	4 (16)
Age, months: mean (s.d.)	46.3 (6.45)	45.2 (6.14)
Questionnaire scores, mean (s.d.)		
Eyberg Child Behaviour Inventory, conduct problems	16.5 (6.86)	16.2 (5.95)
Conners Abbreviated Parent Rating Scale, hyperactivity	16.8 (6.77)	15.8 (7.61)
Kendall Self-Control Rating Scale	127.1 (30.67)	120.5 (26.5)
Observation scores, mean (s.d.)		
Child deviance: sum of physical negative, cry, whine, yell, destructive, smart talk	24.2 (32.4)	31.2 (40.23)
Positive parenting: sum of physical positive, positive affect, praise, problem-solving	22 (17.5)	24.6 (22.51)
Critical parenting: sum of negative commands and critical statements	18.75 (14.25)	20.24 (15.82)

a. There were no statistical differences between the intervention families and the lost to follow-up intervention families using chi-squared and two sample *t*-test analyses.

Table DS3 Parent outcome measures: summary of long-term results for families allocated to intervention condition with complete data for follow-ups ($n = 79$)

Parent measures (cut-off)	Estimated mean differences using mixed model ANOVA											
	Intervention $n = 79$, raw scores: mean (s.d.)			Baseline to follow-up 1			Follow-up 1 to follow-up 2			Follow-up 1 to follow-up 3		
	Baseline	Follow-up 1	Follow-up 2	Follow-up 1	Mean difference (95% CI) <i>P</i>	Effect size (95% CI)	Follow-up 1	Mean difference (95% CI) <i>P</i>	Effect size (95% CI)	Follow-up 2	Mean difference (95% CI) <i>P</i>	Effect size (95% CI)
PSI (90)	101.87 (22.34)	81.76 (20.39)	82.72 (20.03)	83.22 (21.1)	20.11 (14.29 to 25.94) <0.001	1.1 (0.78 to 1.41)	0.96 (-2.59 to 4.52)	0.592	0.09 (-0.23 to 0.4)	1.46 (-2.55 to 5.46)	0.472	0.12 (-0.2 to 0.43)
BDI (19)	17.54 (10.44)	10.29 (9.73)	11.44 (9.85)	10.65 (9.64)	7.25 (4.74 to 9.76) <0.001	0.91 (0.6 to 1.23)	1.15 (-0.58 to 2.21)	0.21 (-0.17 to 0.53)	0.21 (-0.17 to 0.53)	0.35 (-1.63 to 2.34)	0.723	0.06 (-0.26 to 0.37)
Parenting Scale ^a	3.47 (0.79)	2.64 (0.82)	2.67 (0.77)	2.8 (0.77)	0.84 (0.64 to 1.04) <0.001	1.33 (1.02 to 1.65)	0.04 (-0.09 to 0.17)	0.549	0.08 (-0.21 to 0.45)	0.165 (0.03 to 0.3)	0.016	0.45 (0.08 to 0.79)
Positive parenting – observation ^b	21.96 (17.5)	31.66 (19.38)	29.91 (22.68)	30.34 (20.84)	-9.7 (-15.24 to -4.15) 0.001	-0.55 (-0.86 to -0.24)	-1.75 (-7.47 to 3.97) 0.545	-0.1 (-0.41 to 0.22)	-0.1 (-0.41 to 0.22)	-1.32 (-7.04 to 4.41) 0.648	0.07	-0.07 (-0.39 to 0.24)
Critical parenting – observation ^b	18.76 (14.25)	9.58 (8.3)	10.09 (10.07)	10.72 (9.85)	9.18 (5.85 to 12.51) <0.001	0.87 (0.56 to 1.19)	0.51 (-1.89 to 2.91)	0.676	0.07 (-0.25 to 0.38)	1.14 (-1.39 to 3.66)	0.372	0.14 (-0.17 to 0.46)

PSI, Parenting Stress Index; BDI, Beck Depression Inventory.
a. No cut-offs for this measure. Higher score, poorer parenting.
b. No cut-offs for this measure. Frequency count in 30min.

Table DS4 Child outcome measures: summary of long-term results for families allocated to intervention condition with complete follow-up data ($n = 79$)

Child measures (cut-off)	Estimated mean differences using mixed model ANOVA											
	Intervention $n = 79$, raw scores: mean (s.d.)			Baseline to follow-up 1			Follow-up 1 to follow-up 2			Follow-up 1 to follow-up 3		
	Baseline	Follow-up 1	Follow-up 2	Follow-up 1	Mean difference (95% CI) <i>P</i>	Effect size (95% CI)	Follow-up 1	Mean difference (95% CI) <i>P</i>	Effect size (95% CI)	Follow-up 2	Mean difference (95% CI) <i>P</i>	Effect size (95% CI)
ECBI-I (127)	146.44 (24.66)	117.86 (31.58)	117.25 (33.75)	118.53 (36.23)	28.58 (21.36 to 35.8) <0.001	1.25 (0.94 to 1.57)	-0.61 (-6.8 to 4.86)	0.826	-0.04 (-0.35 to 0.28)	0.67 (-6.19 to 7.53)	0.846	0.03 (-0.29 to 0.35)
ECBI-P (11)	16.48 (6.86)	9.89 (8.08)	8.65 (8.18)	8.43 (8.99)	6.6 (4.71 to 8.48) <0.001	1.11 (0.79 to 1.43)	-1.24 (-2.65 to 0.17) 0.083	0.17 0.069	-0.28 (-0.6 to 0.04)	-1.46 (-3.03 to 0.12) 0.069	0.12 0.069	-0.29 (-0.61 to 0.02)
CAPRS (15)	16.75 (6.77)	11.84 (7.25)	12.02 (7.25)	12.48 (7.7)	4.91 (3.42 to 6.4) <0.001	1.05 (0.73 to 1.36)	0.19 (-0.96 to 1.34)	0.743	0.05 (-0.27 to 0.37)	0.65 (-0.73 to 2.02)	0.354	0.15 (-0.17 to 0.47)
SCRS (160)	127.05 (30.67)	114.02 (30.46)	111.67 (34.88)	111.52 (33.84)	13.03 (6.32 to 19.73) <0.001	0.62 (0.3 to 0.93)	-2.35 (-8.16 to 3.45) 0.421	3.45 0.409	-0.13 (-0.45 to 0.19)	-2.51 (-8.52 to 3.51) 0.409	3.51 0.409	-0.13 (-0.45 to 0.19)
Child deviance – observation ^a	24.17 (32.4)	13.52 (22.64)	13.0 (18.88)	11.61 (17.7)	10.65 (2.87 to 18.42) 0.008	0.43 (0.12 to 0.75)	-0.52 (-6.7 to 5.65)	0.867	0.03 (-0.34 to 0.29)	-1.91 (-8.12 to 4.3)	0.542	-0.1 (-0.41 to 0.22)

ECBI-I, Eyberg Child Behaviour Inventory – Intensity scale; ECBI-P, Eyberg Child Behaviour Inventory – Problem scale; CAPRS, Conners Abbreviated Parent Rating Scale, for hyperactivity; SCRS, Kendall Self-Control Rating Scale.
a. Frequency count in 30min.

Table DS5 Proportion of children who underwent moderate, large and very large changes from baseline to follow-up three

Measures (cut-off), size of change ^a	Proportion of children from intention-to-treat				Proportion of children from 'completers'			
	In whole sample		Sample over clinical cut-off at baseline		In whole sample		Sample over clinical cut-off at baseline	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
<i>Antisocial behaviour</i>								
Eyberg Child Behaviour Inventory – Intensity (127)	104		85		79		65	
≥ 0.3 s.d.		58.7		61.2		72.2		75.4
≥ 0.8 s.d.		44.2		48.2		53.2		56.9
≥ 1.5 s.d.		27.9		30.6		34.2		36.9
Eyberg Child Behaviour Inventory – Problem (11)	104		91		79		68	
≥ 0.3 s.d.		62.5		65.9		77.2		82.4
≥ 0.8 s.d.		53.8		60.4		68.4		75.0
≥ 1.5 s.d.		38.5		44.0		48.1		55.9
Observed child deviance (no cut-off)	104		n/a		79		n/a	
≥ 0.3 s.d.		29.8		n/a		32.9		n/a
≥ 0.8 s.d.		19.2		n/a		22.8		n/a
≥ 1.5 s.d.		11.5		n/a		12.7		n/a
<i>Hyperactivity – Conners Abbreviated Parent Rating Scale (15)</i>								
	104		61		79		46	
≥ 0.3 s.d.		58.7		68.9		72.2		82.6
≥ 0.8 s.d.		33.7		44.3		39.2		50.0
≥ 1.5 s.d.		14.4		21.3		16.5		23.9
<i>Self-control – Kendall Self-Control Rating Scale (160)</i>								
	104		15		79		12	
≥ 0.3 s.d.		46.2		73.3		54.4		83.3
≥ 0.8 s.d.		31.7		53.3		38.0		66.7
≥ 1.5 s.d.		16.3		40.0		20.0		50.0
<i>Antisocial behaviour – Strengths and Difficulties Questionnaire (total score) (17)</i>								
	104		59		79		49	
≥ 0.3 s.d.		54.8		62.7		65.8		73.5
≥ 0.8 s.d.		39.4		47.5		49.4		57.1
≥ 1.5 s.d.		18.3		27.1		24.1		32.7
<i>Sibling antisocial behaviour</i>								
Eyberg Child Behaviour Inventory – Intensity (127)	60		29		53		25	
≥ 0.3 s.d.		46.7		62.1		51.0		64.0
≥ 0.8 s.d.		31.7		48.3		32.7		48.0
≥ 1.5 s.d.		13.3		27.6		16.3		32.0
Eyberg Child Behaviour Inventory – Problem (11)	60		31		53		25	
≥ 0.3 s.d.		50.0		67.7		53.1		72.0
≥ 0.8 s.d.		28.3		54.8		28.6		56.0
≥ 1.5 s.d.		16.7		32.3		16.3		32.0

n/a, not applicable.

a. 0.3 denotes a modest improvement; 0.8 denotes a large improvement; 1.5 denotes a very large improvement.