Table A1 Changes in self reported mental health (SDQ) through 24 months; by treatment group and pooled. Finnmark Activity School

Self reported SDQ score*	Change at follow up(95 % CI) Single-family intervention	Change at follow up (95% CI) Multiple-family intervention	Between group difference (95% CI)	P value group by time
Prosocial behaviour		,	•	
6 months	0.12 (-0.83 to 1.06)	0.08(-0.95 to 1.11)	-0.04 (-1.43 to 1.37)	0.958
12 months	0.16 (-0.68 to 0.99)	0.51(-0.33 to 1.35)	0.35 (0.84 to 1.53)	0.564
24 months	-0.60 (-1.45 to 0.26)	0.01(-0.85 to 0.87)	0.61 (-0.60 to 1.82)	0.324
Hyperactivity-inattention				
6 months	0,1 (-0,9 to 1,1)	-0.48 (-1.61 to 0.65)	-0,58 (-2,10 to 0,93)	0.452
12 months	-0.28(-1.18 to 0.62)	-0.32 (-1.22 to0.58)	0,03 (-1,31 to 1,24)	0.959
24 months	-0,16 (-1,08 to 0,76)	0,12 (-0.8 to 1.05)	0,28 (-1,02 to 1,59)	0.670
Emotional symptoms				
6 months	-0.68(-1.62 to 0.27)	-0,85 (-1.92 to 0.22)	-0.18 (-1.6 to 1.25)	0.810
12 months	-1.13(-1.99 to -0.28)	-0.97 (-1.81 to - 0.13)	0.16 (-1.04 to 1.36)	0.795
24 months	-0.74 (-1.62 to 0.14)	-0.60 (-1.47 to 0.27)	0.14 (-1.1 to 1.38)	0.828
Conduct problems				
6 months	-0.59 (`-1.32 to 0.15)	-0.82 (-1.61 to -0.02)	-0.23 (-1.31 to 0.85)	0.671
12 months	-0.67 (`-1.32 to -0.01)	-0.68 (-1.33 to -0.03)	-0.01 (-0.93 to 0.91)	0.979
24 months	-0.31 (-0.98 to 0.36)	-0.40 (-1.08 to 0.26)	-0.09 (-1.04 to 0.86)	0.848
Peer problems				
6 months	-0.68(-1.61 to 0.25)	-0.39 (-1.41 to 0.62)	0.29 ((-1.09 to 1.67)	0.681
12 months	-1.42 (-2.25 to -0.59)	-0.24 (-1.06 to 0.59)	1.19 (-1.05 to 1.36)	0.048
24 months	-0.82 (-1,67 to 0.03)	-0.67(-1.52 to 0.19)	0.15 (-1.05 to 1.36)	0.804
Total difficulties				
6 months	-1.78(-4.11 to 0.54)	-3.02(- 5.73 to -0.32)	-1.24 (-4.8 to 2.32)	0.495
12 months	-3.43 (-5.53 to -1.32)	-2.52 (-4.59 to -0.46)	0.90 (-2.05 to 3.85)	0.549
24 months	-1.87 (-4.05 to 3.85)	-1.91 (-4.07 to 0.23)	-0.04 (- 3.1 to 3.01)	0.977

SDQ Child Total score	Both treatment groups pooled(95% KI)	P value -change from baseline
3 months	-2.27 (-4.02 to -0.53)	0.011
12 months	-2.94 (-4.40 to - 1.47)	0.000
24 months	-1.89 (-3.41 to -0.37)	0.015

Table A2 Changes in parent reported mental health (SDQ) through 24 months by treatment group and pooled. Finnmark Activity School.

Parent reported SDQ score*	Change at follow up(95 % CI) Single-family intervention	Change at follow up(95 % CI) Multiple-family intervention	Between group difference (95% CI)	P value group by time [†]
Prosocial behaviour				
6 months	0.03 (-0.69 to 0.75)	0.25 (-0.43 to 0.93)	0.22 (-0.77 to 1.21)	0.661
12 months	-0.02 (-0.56 to 0.60)	0 (-0.57 to 0.57)	-0.02 (-0.83 to 0.80)	0.966
24 months	0.06 (-0.57 to 0.69)	0,39 (-0.19 to 0.97)	0.33 (-0.53 to 1.18)	0.450
Hyperactivity-				
inattention				
6 months	-0.1 (-0.78 to 0.58)	-0.07 (0.71 to 0.57)	0.03 (-0.91 to 0.96)	0.954
12 months	0.02 (-0.53 to 0.57)	-0.18 (-0.71 to 0.36)	-0.20 (-0.96 to 0.57)	0.611
24 months	-0.49 (-1.09 to 0.10)	-0.44 (-0.99 to 0.10)	0.05 (-0.75 to 0.86)	0.899
Emotional symptoms				
6 months	-0.42 (-1.23 to 0.38)	-0,82 (-1.58 to -0.06)	-0.39 (-1.5 to 0.71)	0.485
12 months	-0.80 (-1.45 to -0.15)	-0.63 (-1.27 to - 0.00)	0.16 (-0.74 to 1.07)	0.721
24 months	-0.76 (-1.47 to -0.06)	`-0.77 (-1.41 to - 0.13)	0.0 (-0.96 to 0.95)	0.992
Conduct problems				

^{*} According to Norwegian version of Strength and Difficulty Questionnaire (23)

[†]P value for equality between groups, group-by-time effect

6 months	-0.46 (-1.02 to 0.09)	-0.11(-0.63 to 0.41)	0.35 (-0.4 to 1.11)	0.359
12 months	-0.11 (-0.56 to 0.33)	-0.09(-0.52 to 0.35)	0.03 (-0.59 to 0.65)	0.932
24 months	-0.21 (-0.70 to 0.27)	-0.06 (-0.50 to 0.38)	0.15 (-0.5 to 0.8)	0.654
Peer problems				
6 months	-0.11(-0.85 to-0.63)	-0.04 (-0.73 to 0.66)	0.07 (-0.95 to 1.09)	0.892
12 months	-0.33 (-0.92 to 0.27)	-0.12(- 0.70 to 0.46)	0.21 (-0.62 to 1.04)	0.625
24 months	-0.54 (-1.19 to 0.10)	-0.36 (-0.95 to 0.23)	0.19 (-0.69 to 1.06)	0.678
Total difficulties				
6 months	-1.38(-3.20 to 0.45)	-1.03(-2.74 to 0.68)	0.35 (-2.16 to 2.85)	0.786
12 months	-1.42 (-2.88 to 0.05)	-0.96(- 2.39 to 0.47)	0.46 (-1.58 to2.51)	0.659
24 moths	-2.25(-3.85 to -0.66)	-1.59 (- 3.05 to -0.14)	0.66 (-1.50 to 2.82)	0.550

SDQ Parents Total score	Both treatment groups pooled(95% KI)	P value -change from baseline
3 months	-1.20 (-2.44 to 0.04)	0.058
12 months	-1.18 (-2.19 to -0.16)	0.023
24 months	-1.89 (-2.96 to -0.83)	0.000

^{*} According to Norwegian version of Strength and Difficulty Questionnaire (23)

[†]P value for equality between groups, group-by-time effect

Table A3 Changes in self perception profile for children through 24 months in Finnmark Activity School; by treatment group.

Self perception profile for children (SPPC) *	Change at follow up(95 % CI) Single-family intervention	Change at follow up(95 % CI) Multiple-family intervention	Between group difference (95% CI)	p value group by time [†]
School competence			Koef (95% KI)	
6 months	0.05(-0.18 to 0.28)	-0.01 (-0.24 to 0.22)	-0.06 (-0.38 to 0.27)	0.742
12 months	0.12 (-0.69 to 0.31)	-0.07 (-0.26 to 0.12)	-0.18 (-0.45 to 0.08)	0.165
24 months	-0.06 (-0.26 to 0.14)	-0.14 (-0.33 to 0.05)	-0.08(-0.35 to 0.20)	0.576
Social acceptanse				
6 months	0.04(-0.20 to 0.29)	0.20 (-0.04 to 0.44)	0.16 (0.19 to 0.50)	0.370
12 months	0.17(-0.03 to 0.37)	0.14 (-0.06 to 0.33)	-0.03 (-0.31 to 0.24)	0.816
24 months	0.03 (-0.17 to 0.23)	-0.04 (-0.24 to 0.16)	0.07 (-0.35 to 0.22)	0.651
Athletic competence				
6 months	0.63(0.34 to 0.91)	0.64 (0.36 to 0.92)	0.01(-0.38 to 0.41)	0.946
12 months	0.71(0.48 to 0.94)	0.58 (0.35 to 0.81)	-0.13 (-0.45 to 0.20)	0.442
24 months	0.57 (0.33 to 0.81)	0.44(0.21 to 0.67)	-0.13 (-0.47 to 0.20)	0.439
Physical appearance				
6 months	0.20 (-0.6 to 0.46)	-0.07(-0.33 to 0.19)	-0.28 (-0.64 to 0.09)	0.144
12 months	0.17 (-0.04 to 0.38)	0.12(-0.10 to 0.33)	-0.06 (-0.35 to 0.24)	0.718
24 months	0.11 (-0.11 to 0.34)	-0.19 (-0.40 to 0.03)	-0.30 (-0.61 to 0.01)	0.056
Behavioural conduct				
6 months	0.03(-0.19 to 0.25)	0.13 (-0.09 to 0.36)	0.10((-0.21 to 0.42)	0.523
12 months	0.16 (-0.02 to 0.34)	0.17 (-0.01 to 0.35)	0.01 (-0.25 to 0.27)	0.945
24 months	-0.04 (-0.15 to 0.23)	0.03 (-0.15 to 0.21)	0.01 (-0.27 to 0.26)	0.968
Self worth				
6 months	-0.11(-0.32 to 0.10)	-0.11(-0.32 to 0.10)	0 (-0.30 to 0.30)	0.993
12 months	0.03 (-0.14 to 0.20)	0.06 (-0.11 to 0.23)	0.04 (-0.21 to 0.28)	0.770
24 months	-0.04 (-0.22 to 0.14)	-0.14 (-0.32 to 0.04)	-0.1 (-0.36 to 0.16)	0.448

* According to Norwegian version of Harter Self- Perception Profile for Children (24)

Table A4 Changes in self reported and parent reported quality of life (KINDL) through 24 months by treatment group and pooled effects. Finnmark Activity School

[†]P value for equality between groups, group-by-time effect

Quality of life Self reported KINDL*	Change at follow up(95 % CI) Single-family intervention	Change at follow up(95 % CI) Multiple-family intervention	Between group difference (95% CI)	p value group by time [†]
Total				
6 months	0.20 (-5.14 to 5.54)	0.95(-4.41 to 6.31)	0.75 (-6.82 to 8.32)	0.846
12 months	4.43 (-0.21 to 9.07)	2.64(-1.48 to 6.75)	-1.80 (-8.00 to 4.41)	0.570
24 months	-0.68 (-5.31 to 3.96)	-1.45(-5.61 to 2.70)	-0.78 (-7.00 to 5.45)	0.807
Parent reported KINDL*				
Total				
6 months	-1.93 (-6.43 to 2.57)	3.01 (-0.79 to 6.80)	4.94 (-0.95 to 10.82)	0.100
12 months	0.32 (-3.05 to 3.68)	2.99 (-0.28 to 6.25)	2.67 (-2.02 to 7.36)	0.264
24 months	1.61 (-1.85 to 5.07)	2.27 (-0.95 to 5.48)	0.66 (-4.06 to 5.38)	0.784
Physical				
6 months	-3.47 (-11.72 to 4.79)	6.40 (-1.39 to 14.20)	9.87 (-1.48 to 21.23)	0.088
12 months	4.58 (-2.16 to 11.33)	3.05 (-3.57 to 9.67)	-1.53 (-10.98 to 7.92)	0.751
24 months	4.39 (-2.84 to 11.63)	1.84 (-4.87 to 8.56)	-2.55 (-12.42 to 7.32)	0.613
Emotions				
6 months	0.01 (-6.35 to 6.36)	5.49 (-0.10 to 11.08)	5.49 (-2.98 to 13.95)	0.204
12 months	1.06 (-3.83 to 5.94)	1.85 (-2.88 to 6.59)	0.80 (-6.01 to 7.60)	0.819
24 months	0.17 (-5.00 to 5.34)	5.30 (0.54 to 10.06)	5.13 (-1.90 to 12.16)	0.153
Self esteem				
6 months	-2.79 (`-9.04 to 3.47)	2.13(-3.73 to 8.00)	4.92 (-3.66 to 13.50)	0.261
12 months	-1.36 (`-6.49 to 3.78)	5.38(0.46 to 10.31)	6.74 (-0.37 to 13.85)	0.063
24 months	5.15 (-0.25 to 10.55)	1.27 (-3.63 to 6.17)	-3.88 (-11.18 to 3.41)	0.297

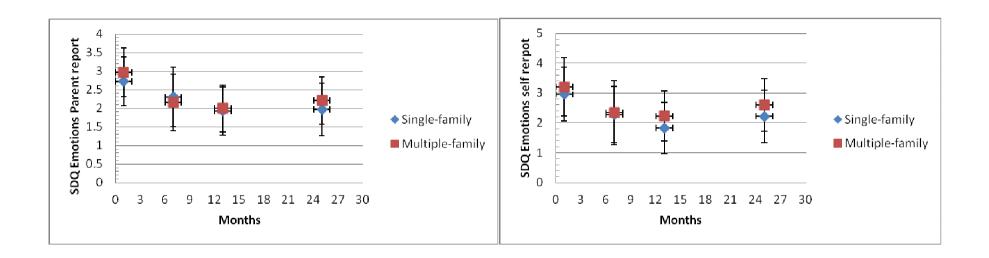
KINDL Child Total score	Both treatment gro	oups pooled (95% CI)	P value -change from baseline	
24 months	-0.57 (-5.10 to 3.96)	2.01 (-2.21 to 6.24)	2.58 (-3.61 to 8.78)	0.414
12 months	0.37 (-4.03 to 4.76)	3.63 (-0.66 to 7.92)	3.27 (-2.88 to 9.41)	0.297
6 months	-1.22 (-6.65 to 4.21)	-2.21 (-7.19 to 2.77)	-0.99(-8.36 to 6.37)	0.792
School				
24 moths	2.09 (-2.38 to 6.55)	1.35 (-2.75 to 5.46)	-0.73 (-6.80 to 5.34)	0.813
12 months	0.41 (-3.78 to 4.61)	2.91(-1.21 to 7.02)	2.49 (-3.38 to 8.37)	0.406
6 months	-1.58 (-6.87 to 3.71)	3.13(-1.67 to 7.93)	4.70 (-2.44 to 11.85)	0.197
Friends				
24 months	-0.23 (-4.84 to 4.37)	2.23 (-2.01 to 6.48)	2.46 (-3.80 to 8.72)	0.441
12 months	1.22 (-3.04 to 5.48)	0.71 (-3.55 to 4.97)	-0.51 (-6.54 to 5.51)	0.867
6 months	0.32(-5.02 to 5.65)	1.30 (-3.69 to 6.29)	0.99(-6.32 to 8.29)	0.791
Family				

KINDL Child Total score	Both treatment groups pooled (95% CI)	P value -change from baseline
6 months	0.53 (-3.21 to 4.27)	0.781
12 months	3.39 (0.34 to 6.43)	0.029
24 months	-1.16 (-4.22 to 1.90)	0.457
KINDL Parents Total		
score	Both treatment groups pooled (95% CI)	P value -change from baseline
6 months	0.92 (-1.96 to 3.81)	0.531
12 months	1.67 (-0.67 to 4.02)	0.161
24 months	1.90 (-0.45 to 4.25)	0.113

^{*} According to Norwegian version of "Kinder Lebensqualitet Fragebogen" KINDL (25)

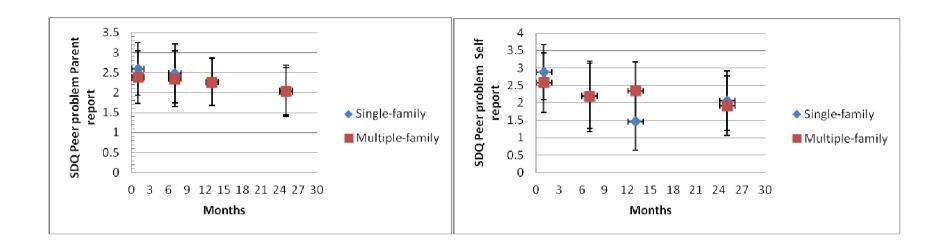
[†]P value for equality between groups, group-by-time effect

Figure A1 Parent and self- reported mental health (SDQ) emotional symptoms from baseline to 24 months by intervention group. Finnmark Activity School



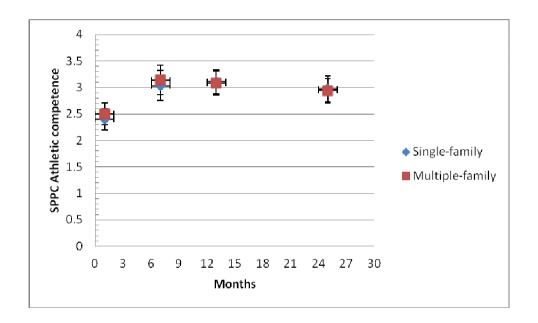
Mean (95% CI) changes in SDQ score emotional symptoms from baseline to 24- months follow up by intervention group.

Figure A2 Parent and self- reported mental health (SDQ) peer problem. Finnmark Activity School



Mean (95% CI) changes in SDQ score peer problem from baseline to 24- months follow up by intervention group.

Figure A 3 Self esteem, athletic competences. Finnmark Activity School



Mean (95% CI) changes in Self Perception Profile, athletic competence from baseline to 24- months follow -up by intervention group.