

Online Supplement

Table S1. Flow of participants into the analytic sample.

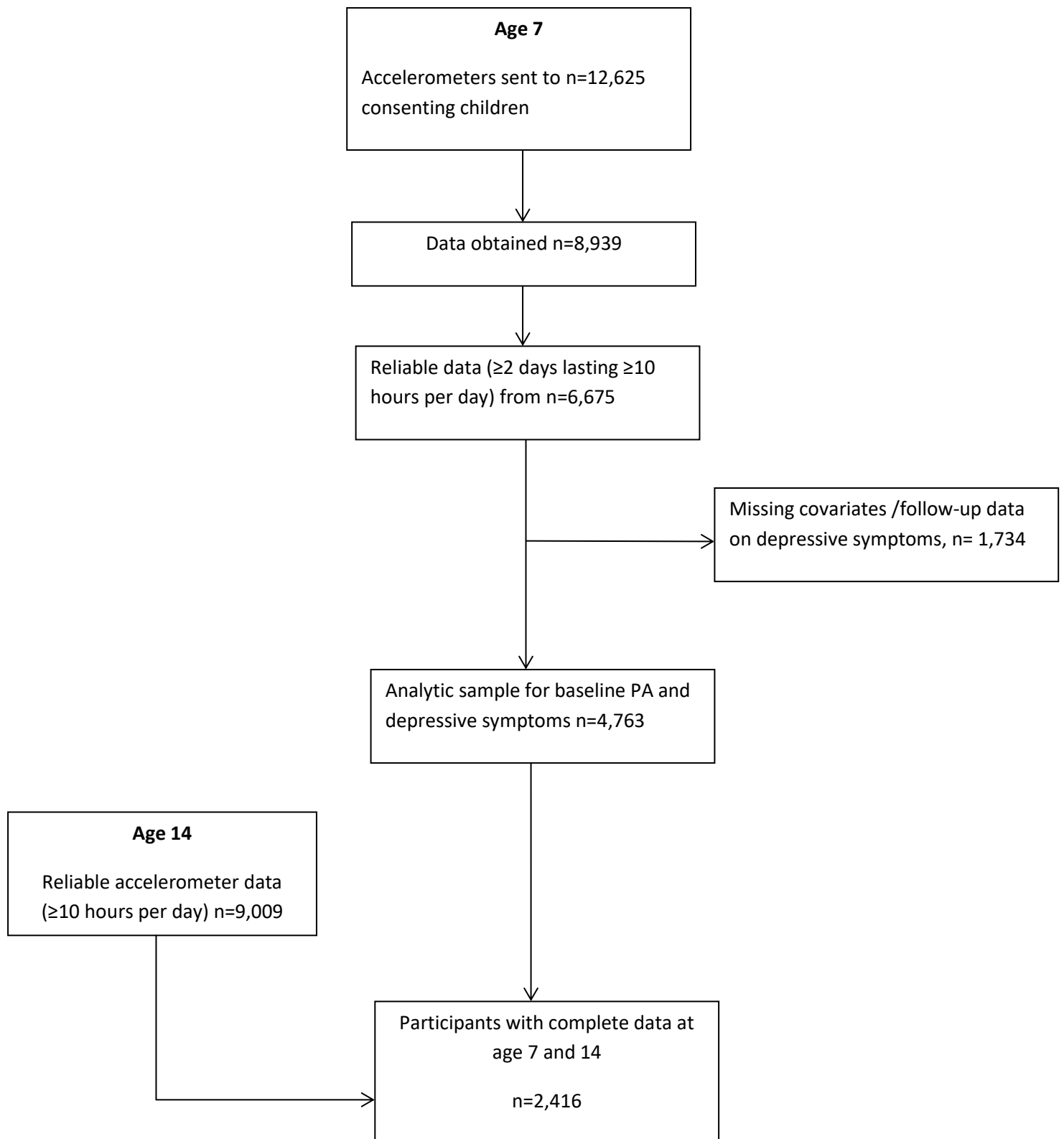


Table S2. Prospective association between physical activity at baseline and depressive symptoms at aged 14 after removal of participants with psychological distress at baseline.

Baseline activity	Boys		Girls	
	% SMFQ ≥ 12	Odds ratio (95% CI) [†]	% SMFQ ≥ 12	Odds ratio (95% CI) [†]
<i>Sedentary</i>				
Low (<6 hr/d)	7.5	1.0 (Ref)	21.5	1.0 (Ref)
Medium (6 – 7 hr/d)	7.0	0.91 (0.61, 1.35)	23.0	1.18 (0.91, 1.52)
High (>7 hr/d)	9.1	1.12 (0.70, 1.79)	22.1	1.16 (0.85, 1.57)
<i>LPA</i>				
Low (<4.5 hr/d)	7.7	1.0 (Ref)	23.3	1.0 (Ref)
Medium (4.5 – 5 hr/d)	7.5	0.93 (0.63, 1.35)	22.5	0.88 (0.70, 1.11)
High (>5 hr/d)	8.4	1.05 (0.70, 1.57)	20.8	0.78 (0.60, 1.00)
<i>MVPA</i>				
Low (<51 min/d)	8.5	1.0 (Ref)	22.5	1.0 (Ref)
Medium (51 – 69 min/d)	7.8	0.86 (0.58, 1.30)	22.1	1.03 (0.83, 1.28)
High (>69 min/d)	7.6	0.87 (0.59, 1.30)	21.8	1.12 (0.86, 1.46)

Odds ratios are adjusted for: total SDQ score at baseline, Actigraph wear time, parental occupational social class, body mass index at baseline. Analyses of MVPA and LPA are mutually adjusted; analyses of sedentary behavior are adjusted for MVPA.

Table S3. Characteristics of the sample in relation to changes in physical activity (n=2,416)

Baseline characteristic	Physical activity change			
	Low baseline/Low follow-up	Low baseline/ High follow-up	High baseline/ Low follow-up	High baseline/ High follow-up
Sex (% boys)	46.2	48.0	46.4	46.9
Occupational social class (% Professional/Managerial)	38.7	42.5	33.1	40.2
SDQ score (mean±SE)	6.3±0.18	6.0±0.20	6.7±0.21	6.6±0.17
Body mass index (kg.m ⁻²)	16.8±0.10	16.5±0.10	16.2±0.10	16.2±0.10

Table S4. Association between change in activity from aged 7 to 14 and depressive symptoms aged 14 after removal of participants with psychological distress at baseline.

PA change category		Boys			Girls		
Baseline PA [‡]	Follow-up PA	Cases/N	% SMFQ ≥12	Odds ratio (95% CI) [†]	Cases/N	% SMFQ ≥12	Odds ratio (95% CI) [†]
Low	Low	25/294	8.5	1.0 (Ref)	75/343	21.9	1.0 (Ref)
Low	High	17/266	6.4	0.77 (0.40, 1.48)	40/279	14.3	0.62 (0.40, 0.96)
High	Low	18/223	8.1	1.35 (0.53, 3.43)	67/283	23.7	0.87 (0.49, 1.55)
High	High	24/329	7.3	1.16 (0.47, 2.91)	81/381	21.3	0.76 (0.42, 1.36)

Effect estimates are adjusted for: total SDQ score at baseline, parental occupational social class, body mass index at baseline, PA at baseline (cpm)