

Table S1. Estimates of total activity by measurement, demographic and behavioural characteristics functional parameters (FANOVA) averaged over specific day time windows; 8:30-9:30; 9:30-12:00; 12:00-13:30; or 17:30-19:30.

		8:30-9:30	9:30-12:00	12:00-13:30	13:30-15:00	15:00-17:30	17:30-19:30
	n	Coef 95%CI	Coef 95%CI	Coef 95%CI	Coef 95%CI	Coef 95%CI	Coef 95%CI
Child's sex							
Male	3176	Ref	Ref	Ref	Ref	Ref	Ref
Female	3321	-54.1 (-72.8; -36.7)	-60.8 (-73.2; -44.4)	-128.5 (-145.5; -107.3)	-60.7 (-77.6; -41.3)	-74.1 (-90.2; -50.6)	-51.6 (-70.2; -31.9)
Weekend day of measurement							
No	5065	Ref	Ref	Ref	Ref	Ref	Ref
Yes	1432	-213.9 (-232.1; -198.7)	100.4 (81.5; 127.1)	-193.4 (-216.4; -173.2)	137.0 (113.7; 164.7)	26.3 (-2; 47.3)	22.1 (-1.7; 44.7)
Season							
Winter	875	Ref	Ref	Ref	Ref	Ref	Ref
Spring	656	2.3 (-28; 27)	61.8 (31.3; 88.5)	60.8 (20.6; 107.8)	111.7 (68.7; 146.3)	171.0 (124.4; 222.9)	221.1 (171.2; 264.7)
Summer	2777	-36.6 (-58.5; -8.6)	54.2 (28.3; 77.3)	-1.6 (-40.4; 32.4)	101.5 (62.3; 133.1)	86.8 (49.7; 122.7)	169.9 (142.2; 208.4)
Autumn	2189	36.1 (10.7; 66.8)	20.3 (-4; 51.6)	50.4 (11.2; 92)	24.5 (-57.5; 8.8)	55.7 (19.7; 92.2)	70.7 (34.6; 102.3)
Country							
England	4175	Ref	Ref	Ref	Ref	Ref	Ref
Wales	923	-19.3 (-43.7; 3.6)	-12.6 (-29.4; 6.8)	-29.8 (-57.9; 1.6)	34.8 (10; 63.1)	-21.2 (-45.1; 5.3)	19.4 (-4.4; 48.7)
Scotland	766	-15.2 (-35.4; 4.4)	22.7 (-7.5; 47)	-9.4 (-41.8; 22)	-15.4 (-48; 14.8)	-5.3 (-38.9; 26.1)	25.4 (-9.2; 64.1)
Northern Ireland	633	-63.6 (-85.8; -42.1)	-58.4 (-80.4; -37.4)	-121.3 (-160.8; -83.7)	3.8 (-48.4; 37.2)	-6.0 (-53.5; 34.7)	73.3 (28.3; 112.8)
Child's ethnic group							
White	5711	Ref	Ref	Ref	Ref	Ref	Ref

Mixed	168	-93.9 (-138.2; -51.8)	32.3 (-84.7; 11.1)	-14.5 (-85.2; 56.2)	-33.6 (-92.2; 29.8)	-61.2 (-99.5; 16.4)	3.2 (-64.4; 61.2)
Black	142	-1.9 (-44.9; 44.5)	29.4 (-25.6; 85.4)	59.9 (-9.1; 146.2)	-8.7 (-70.9; 80.7)	27.8 (-43.6; 122.2)	-33.6 (-88.5; 34.3)
Indian/Pakistani/Bangladeshi	386	-98.3 (-147.9; -47)	-58.5 (-95.5; -20.1)	-35.1 (-74.9; 7.2)	-22.8 (-57.6; 15)	-57.0 (-101.9; -6.7)	18.6 (-30; 65.4)
Other	90	-63.6 (-156.6; 25)	-46.4 (-104.2; 32.7)	-20.9 (-147.3; 140.4)	-66.3 (-139.6; 46.3)	-90.7 (-213; -12.7)	-67.5 (-144.1; 22.9)

		8:30-9:30	9:30-12:00	12:00-13:30	13:30-15:00	15:00-17:30	17:30-19:30
	n	Coef 95%CI	Coef 95%CI	Coef 95%CI	Coef 95%CI	Coef 95%CI	Coef 95%CI
Maternal socioeconomic status							
Never worked and long-term unemployed	268	Ref	Ref	Ref	Ref	Ref	Ref
Routine and manual occupations	2582	-25.5 (-49.9; -8.5)	-3.0 (-24.8; 14.8)	-3.6 (-35.8; 22.6)	-1.9 (-29.8; 23.6)	8.2 (-22.4; 32.6)	31.1 (0.9; 61.4)
Intermediate occupations	1201	39.3 (-10.8; 96.7)	26.5 (-9.6; 61.4)	9.2 (-41.8; 60)	10.8 (-35.9; 42.4)	-14.8 (-69; 39.5)	-31.8 (-91.5; 33.7)
Higher managerial, administrative and professional occupations	2446	72.5 (16.3; 132.4)	26.8 (-4.9; 62.2)	44.6 (-10.8; 96.3)	1.5 (-50.4; 45.4)	-22.8 (-78.3; 35.3)	-32.7 (-98.8; 26.1)
Maternal lone parenthood status							
Non-lone parent	5485	Ref	Ref	Ref	Ref	Ref	Ref
Lone parent	989	89.3 (37; 141.6)	45.1 (1.1; 85.5)	29.7 (-26.6; 75.6)	14.8 (-43.7; 55.1)	-9.2 (-63.9; 44.6)	-71.2 (-138.6; 4.2)
Time spent in sports/activities (club or classes)							
Not at all or less than twice a week	3370	Ref	Ref	Ref	Ref	Ref	Ref
2 days a week	1576	1.5 (-13.9; 19.6)	20.0 (2.7; 39)	2.6 (-21.7; 29.8)	19.4 (1.6; 48.4)	-1.5 (-25.4; 26.9)	-4.6 (-32; 22.4)
3 or more days a week	1544	11.3 (-6.6; 30.3)	58.0 (39.9; 73.9)	15.1 (-11.2; 32.9)	-3.4 (-30.1; 22.2)	40.5 (16.4; 67.8)	36.8 (5.3; 71.9)
Time spent reading for enjoyment							
Several times a week or less	3806	Ref	Ref	Ref	Ref	Ref	Ref
Every day or almost every day	2682	6.5 (-10.2; 21.2)	-8.0 (-21.4; 5.6)	-20.5 (-40.6; 1.8)	-9.8 (-31.8; 8.1)	-15.4 (-33.8; 1.7)	-43.2 (-66; -19.2)
Time spent with friends after school							
Less often than several times a week	3441	Ref	Ref	Ref	Ref	Ref	Ref
Several times a week or more	2674	-10.0 (-27.5; 8)	10.1 (-2.8; 24.3)	13.2 (-2.5; 33.2)	19.7 (0.2; 34.2)	29.4 (9.6; 51.6)	73.0 (46.2; 96.5)

		8:30-9:30	9:30-12:00	12:00-13:30	13:30-15:00	15:00-17:30	17:30-19:30
	n	Coef 95%CI	Coef 95%CI	Coef 95%CI	Coef 95%CI	Coef 95%CI	Coef 95%CI
Mode of transport to and from school							
Only walking/cycling	3030	Ref	Ref	Ref	Ref	Ref	Ref
Mixed	376	-24.2 (-54.5; 8.3)	14.1 (-18.2; 46.4)	-28.6 (-61.2; 2.4)	13.9 (-30; 54.2)	6.4 (-28.3; 51.5)	21.5 (-16.6; 63.5)
Only car	3074	-75.9 (-93.2; -60.1)	-3.0 (-16.1; 11.6)	-8.9 (-26.7; 13.4)	-2.7 (-23.9; 23.5)	-14.7 (-37; 9.4)	-17.7 (-34.8; 5.5)
Number of cars/vans in regular use per household							
0	579	Ref	Ref	Ref	Ref	Ref	Ref
1	2304	-57.1 (-90; -26.7)	-4.4 (-32.6; 20.5)	-18.5 (-66.8; 21.6)	2.8 (-38; 38.6)	-59.6 (-108.1; -18.9)	-1.0 (-51.5; 42)
2	3230	-86.2 (-108.5; -46.4)	0.4 (-23.7; 29.8)	-48.5 (-81.8; 0.5)	-4.7 (-47.7; 34)	-88.3 (-138.9; -45)	-34.7 (-89.6; 7.5)
3+	374	-98.8 (-142.8; -54)	-8.4 (-45.5; 40.2)	-75.6 (-132.9; -18.7)	-4.0 (-56.3; 36.6)	-142.7 (-200; -92.4)	-3.5 (-75.7; 73.6)
Time spent viewing television (hours daily)							
≤ 1 hour	1337	Ref	Ref	Ref	Ref	Ref	Ref
> 1 & < 3 hours	4205	-5.2 (-28.6; 13.5)	-1.9 (-17.8; 12.5)	18.1 (-14.5; 42.1)	7.9 (-9.3; 27.9)	14.5 (-9.4; 32.7)	18.8 (-15.6; 42.5)
≥ 3 hours	948	-8.1 (-35.5; 17.8)	6.7 (-13.2; 30.9)	42.8 (8.3; 83.9)	39.5 (3.5; 70.1)	7.0 (-25.5; 26.8)	6.2 (-40.2; 43.3)