Analyses stratified by HDI: results from log-ratio mixed effect linear regression models

Table e4. Very High HDI: (Australia, United States, Canada, Finland, England and Portugal)

	$\hat{\beta}$	Std. Error	t value	p
ilr sleep*	-0.52	1.45	-0.36	0.72
ilr sedentary	-0.83	1.19	-0.70	0.48
ilr LPA	-0.67	1.17	-0.58	0.56
ilr MVPA	2.03	0.63	3.20	0.001
ANOVA: Type II Wald chi-squared tests	Chisq	Df	p	
ilr coordinates (composition as a whole)	12.72	3	0.005	
Covariates:				
Sex	0.95	1	0.33	
Parental education level	21.41	2	<0.001	
Number of siblings	4.36	4	0.36	
Number of parents	0.28	1	0.59	
Child zBMI	12.93	1	<0.001	

$\hat{\beta}$, unstandardized regression coefficient; SE, standard error; *ilr*, isometric log ratio of one behavior relative to the geometric mean of the remaining behaviors; LPA, light physical activity; MVPA, moderate-to-vigorous physical activity; zBMI: Body mass index z-score. *For example, this *ilr* represents sleep, relative to the geometric mean of sedentary time, LPA and MVPA. Analysis adjusted for potential clustering at school level (school included as a random effect)

Table e5. High HDI: Brazil and Colombia

	$\hat{\beta}$	Std. Error	t value	p
ilr sleep*	2.89	1.91	1.51	0.13
ilr sedentary	-1.63	1.46	-1.12	0.26
ilr LPA	-1.05	1.58	-0.67	0.51
ilr MVPA	-0.21	0.80	-0.26	0.80
ANOVA: Type II Wald chi-squared tests	Chisq	Df	p	
ilr coordinates (composition as a whole)	2.30	3	0.51	
Covariates:				
Sex	2.57	1	0.11	
Parental education level	4.71	2	0.09	
Number of siblings	11.56	4	0.02	
Number of parents	0.44	1	0.51	
Child zBMI	2.39	1	0.11	

$\hat{\beta}$, unstandardized regression coefficient; SE, standard error; *ilr*, isometric log ratio of one behavior relative to the geometric mean of the remaining behaviors; LPA, light physical activity; MVPA, moderate-to-vigorous physical activity; zBMI: Body mass index z-score. *For example, this *ilr* represents sleep, relative to the geometric mean of sedentary time, LPA and MVPA. Analysis adjusted for potential clustering at school level (school included as a random effect)

Table e6. Low-middle HDI (China, South Africa, India and Kenya)

	$\hat{\beta}$	Std. Error	t value	p
ilr sleep*	1.30	2.22	0.59	0.56
ilr sedentary	-0.94	1.68	-0.56	0.57
ilr LPA	0.35	1.61	0.22	0.83
ilr MVPA	-0.70	0.88	-0.80	0.42
ANOVA: Type II Wald chi-squared tests	Chisq	Df	p	
ilr coordinates (composition as a whole)	0.82	3	0.84	
Covariates:				
Sex	1.55	1	0.21	
Parental education level	15.05	2	<0.001	
Number of siblings	10.27	4	0.04	
Number of parents	2.38	1	0.12	
Child zBMI	0.17	1	0.68	

$\hat{\beta}$, unstandardized regression coefficient; SE, standard error; *ilr*, isometric log ratio of one behavior relative to the geometric mean of the remaining behaviors; LPA, light physical activity; MVPA, moderate-to-vigorous physical activity; zBMI: Body mass index z-score. *For example, this *ilr* represents sleep, relative to the geometric mean of sedentary time, LPA and MVPA. Analysis adjusted for potential clustering at school level (school included as a random effect)