

Socio-demographic correlates of health behaviors of children and adolescents during the COVID-19 pandemic: a cross-sectional study

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Supplementary table 1. Association between socio-demographic characteristics and not meeting health behavior recommendations among children and adolescents in Geneva, Switzerland, 2022

	Not meeting screen time recommendations	Not meeting physical activity recommendations ^a	Lowest tertile of green space time	Not meeting sleep duration recommendations
	aOR (95%CI)	aOR (95%CI)	aOR (95%CI)	aOR (95%CI)
CHILDREN (3-11 yo)				
Sex^b				
Male	Ref.	Ref.	Ref.	Ref.
Female	0.95 (0.67 - 1.35)	1.47 (1.14 - 1.89)**	1.14 (0.92 - 1.42)	1.25 (0.93 - 1.68)
Parents' birth country				
At least one parent born in Switzerland	Ref.	Ref.	Ref.	Ref.
Parents born outside of Switzerland	1.71 (1.17 - 2.49)**	0.92 (0.71 - 1.20)	0.95 (0.74 - 1.22)	1.46 (1.07 - 1.98)*
Parents' highest education				
College or higher	Ref.	Ref.	Ref.	Ref.
Lower than college	3.28 (2.16 - 4.99)**	0.80 (0.56 - 1.16)	1.19 (0.85 - 1.66)	1.79 (1.22 - 2.60)**
Household financial situation				
Very good	Ref.	Ref.	Ref.	Ref.
Good	1.27 (0.80 - 2.02)	1.11 (0.83 - 1.50)	1.14 (0.86 - 1.52)	0.87 (0.60 - 1.25)
Average-to-poor	2.46 (1.47 - 4.12)**	0.97 (0.66 - 1.43)	1.09 (0.75 - 1.57)	1.95 (1.29 - 2.95)**
ADOLESCENTS (11-17 yo)				
Sex^b				
Male	Ref.	Ref.	Ref.	Ref.
Female	0.92 (0.67 - 1.27)	2.60 (1.95 - 3.46)**	1.97 (1.48 - 2.63)**	1.61 (1.19 - 2.19)**
Parents' birth country				
At least one parent born in Switzerland	Ref.	Ref.	Ref.	Ref.
Parents born outside of Switzerland	1.16 (0.82 - 1.63)	1.19 (0.88 - 1.59)	0.86 (0.64 - 1.16)	1.41 (1.03 - 1.93)*
Parents' highest education				
College or higher	Ref.	Ref.	Ref.	Ref.
Lower than college	1.32 (0.89 - 1.96)	1.35 (0.94 - 1.93)	1.22 (0.84 - 1.77)	1.25 (0.86 - 1.82)
Household financial situation				
Very good	Ref.	Ref.	Ref.	Ref.
Good	1.28 (0.88 - 1.86)	1.54 (1.10 - 2.16)*	1.41 (1.01 - 1.98)*	0.98 (0.69 - 1.40)
Average-to-poor	1.03 (0.63 - 1.69)	1.47 (0.97 - 2.23)	1.41 (0.92 - 2.16)	1.15 (0.75 - 1.79)

* for p-values < 0.05, ** < 0.01.

Results are adjusted odds ratios (aOR) and 95% confidence intervals (95% CI) from generalized estimating equations for not meeting health behavior recommendations adjusted for age and sex, and following a binomial distribution. Analyses performed on complete cases.

^a Further adjusted for physical limitation based on the parent report of a diagnosed medical condition lasting over 6 months that could limit engagement in physical activity.

^b Adjusted for age only (and physical limitation for physical activity)

Supplementary table 2. Assessment of health behaviors and recoding into adherence to age-specific recommendations.

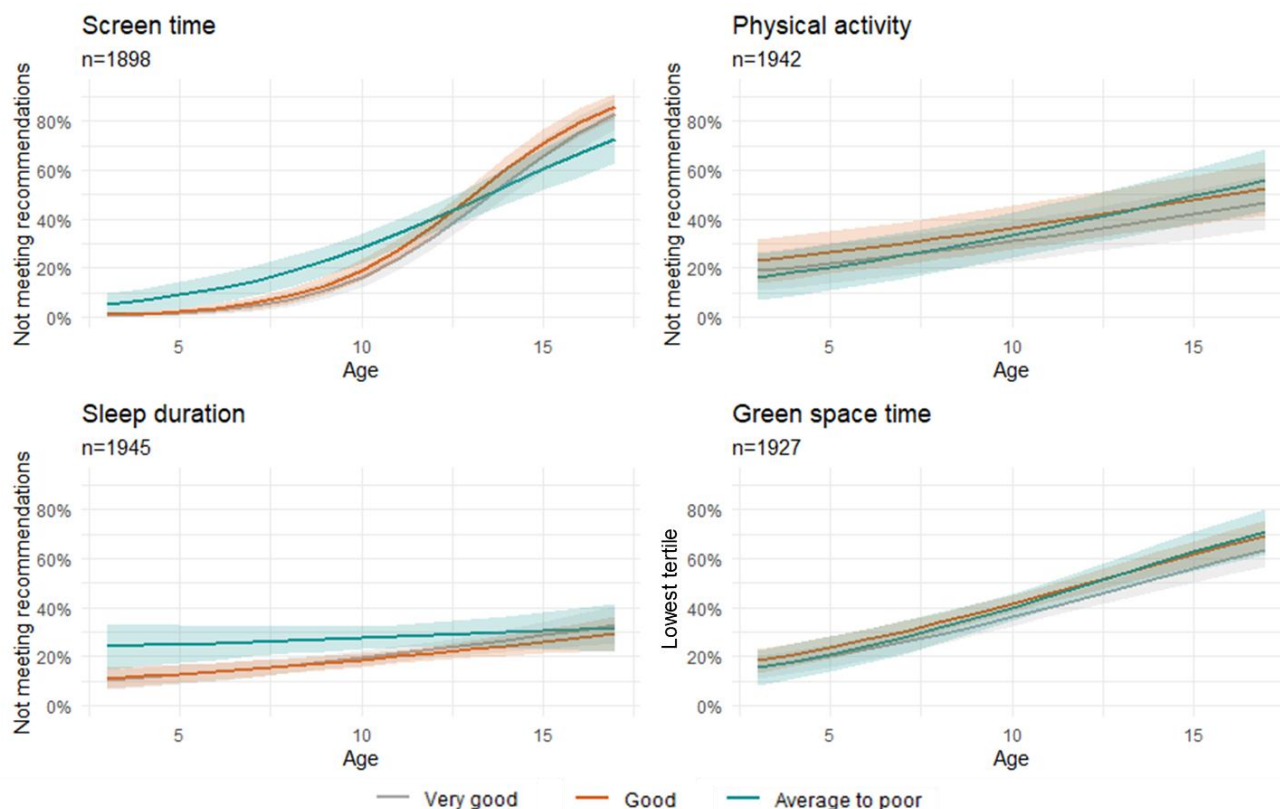
	Meeting recommendations	Not meeting recommendations
Screen time		
On average, how much time does the child currently spend on screens for recreational purposes on week and weekend days (e.g. watching videos, gaming or messaging on TV, smartphone, computer)?		
3-4 years ^a	≤ 1h/day	> 1h/day
5-13 years ^b	≤ 2h/day	> 2h/day
14-17 years ^b	≤ 2h/day (self-report)	> 2h/day (self-report)
Physical activity		
On average, how much time does the child currently spend engaging in physical activity on week and weekend days (e.g., sports, outdoor play, walking, biking)?		
3-4 years ^a	≥ 1h30/day	< 1h30/day
5-17 years ^c	≥ 1h/day	< 1h/day
Sleep time		
On average, how much times does the child sleep on week and weekend days (total time, including naps)?		
3-4 years ^a	≥ 10h/day and ≤ 13h/day	< 10h/day or > 13h/day
5-13 years ^b	≥ 9h/day and ≤ 11h/day	< 9h/day or > 11h/day
14-17 years ^b	≥ 8h/day and ≤ 10h/day	< 8h/day or > 10h/day
Green spaces time		
On average, how much times does the child spend in green spaces weekly (e.g. playground, garden, park, forest, mountain)?		
3-17 years	middle and highest sample tertile	lowest sample tertile

^a World Health Organization. Guidelines on physical activity, sedentary behaviour and sleep for children under 5 years of age 2019 (reference n° 37).

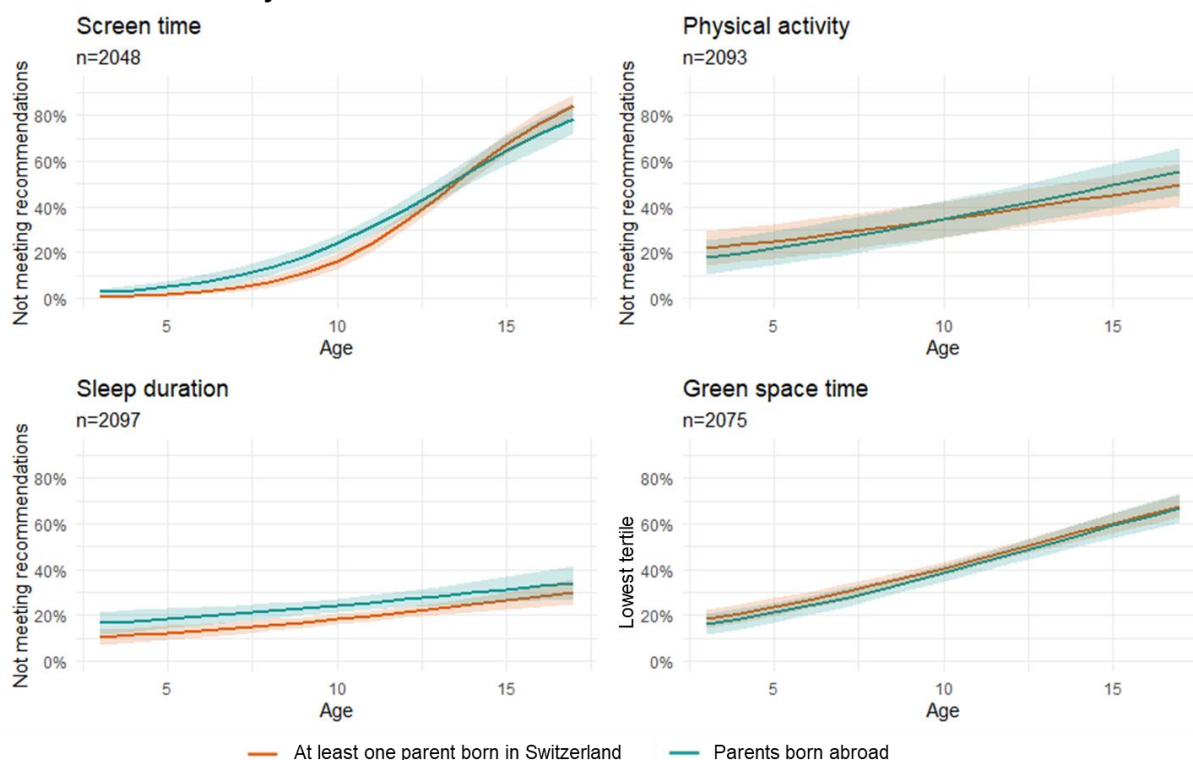
^b Canadian Society for Exercise Physiology. Canadian 24-Hour Movement Guidelines for the Children and Youth (5-17 years): An Integration of Physical Activity, Sedentary Behaviour, and Sleep 2016 (reference n° 38).

^c World Health Organization. WHO guidelines on physical activity and sedentary behaviour 2020 (reference n° 36).

Household financial situation



Parents' birth country



Supplementary figure 1. Predicted proportion of children not meeting health behavior recommendations according to age and household financial situation or parents' country of birth in Geneva, Switzerland, 2022. Results are from generalized estimating equations adjusted for sex (and physical limitations for physical activity), shaded areas correspond to the 95% confidence intervals. Analyses performed on complete cases.