

Health Behaviour in School-aged Children survey in French-speaking Belgium

What is changing between primary and secondary school?

E. Méroc, T. Lebacqz, N. Moreau, M. Dujeu, C. Pedroni, I. Godin, K. Castetbon

Université libre de Bruxelles, Ecole de Santé Publique



Context and objective

The transition from primary to secondary school is related to **multiple changes**:

- At **school** level: teacher relationships, educational demands, school size, ...
 - But also **physical, psychological, emotional, relational**
 - Changes in **health behaviours**
- Objective = to identify health behaviours and health outcomes undergoing significant changes between primary and secondary school
- Help to develop effective and targeted actions to improve health and well-being, and promote smooth transitions

The HBSC survey

The **Health Behaviour in School-aged Children (HBSC) survey** is an international study:

- Conducted in > 40 regions/countries in Europe and North-America (WHO regional office for Europe)
- Repeated every four years
- Objective = to describe well-being, health behaviours and outcomes of adolescents and to investigate their sociodemographic determinants
 - up-to-date information to develop and improve health promotion programmes

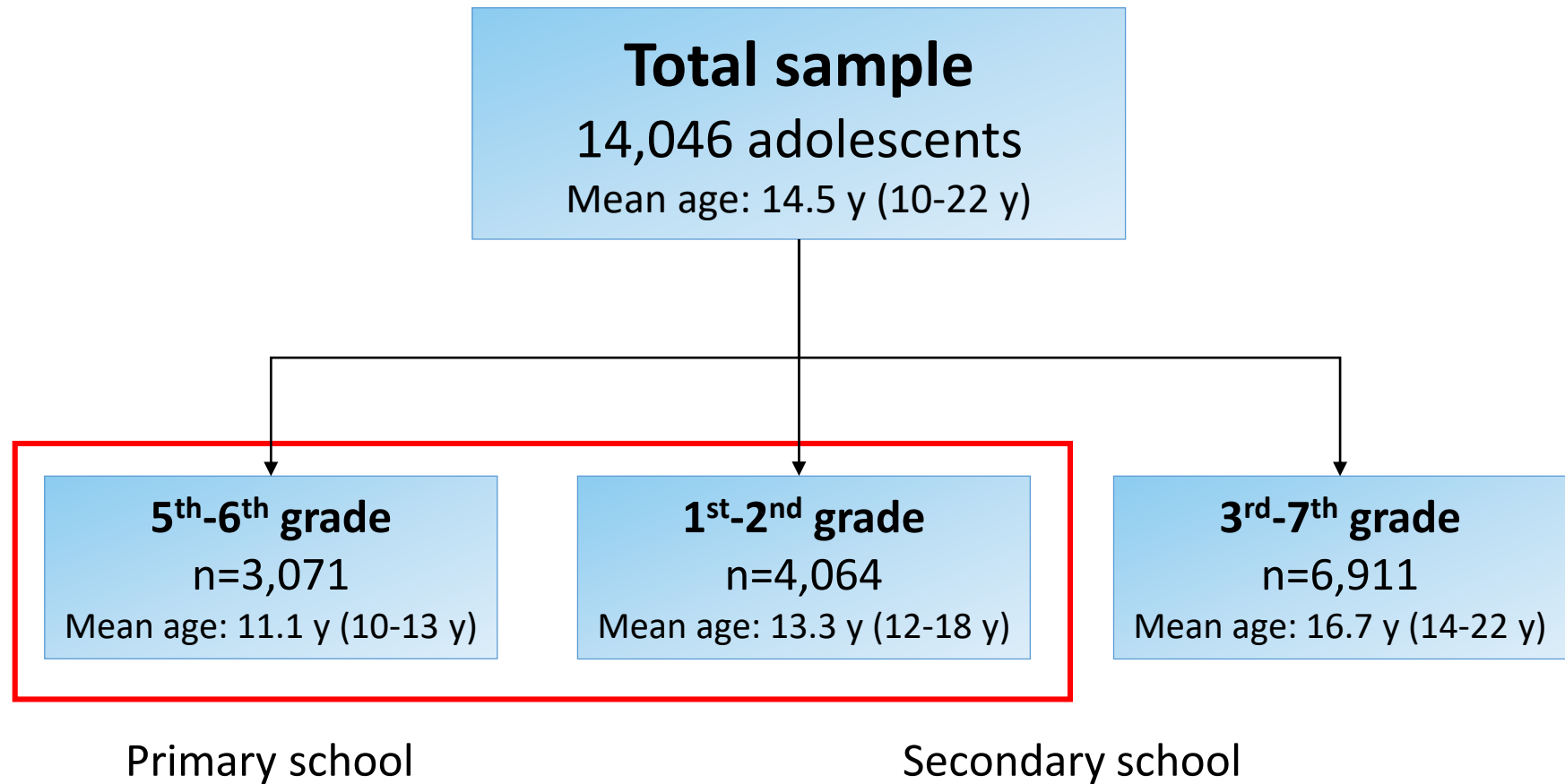
→ 2014 HBSC survey in French-speaking Belgium

Methodology

In **French-speaking Belgium** (Wallonia and Brussels):

- Data collected among adolescents from the 5th of primary to the last year of secondary school
- Two-stage cluster **sampling method**
 - Schools as primary sample units → stratification per province and educational network
 - Classes as secondary sample units → all grades were sampled
 - All students of selected classes were included in the sample
- Standardised **questionnaires**
 - Self-administrated by the students in the classroom
 - Treated as confidential

Sample characteristics



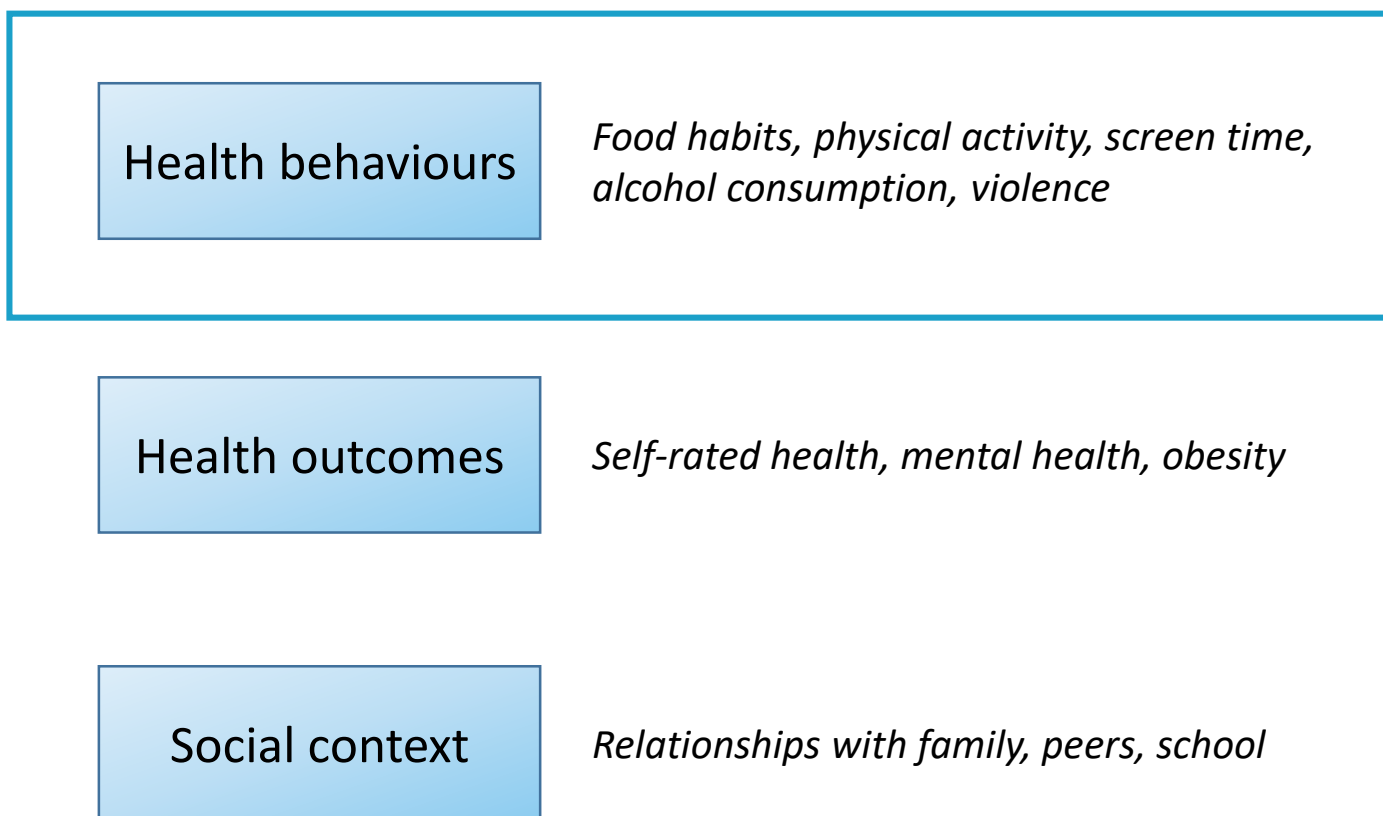
Analyses

Multivariable logistic regressions were used to identify indicators with significant changes between 5th-6th primary and 1st-2nd secondary

- Dependent variable: health indicators
- Independent variable: school level (5th-6th vs 1st-2nd)
- Adjustment variables:
 - Sex
 - Family structure: two parents, blended, lone-parent, other
 - Family Affluence Scale (FAS): high, medium, low

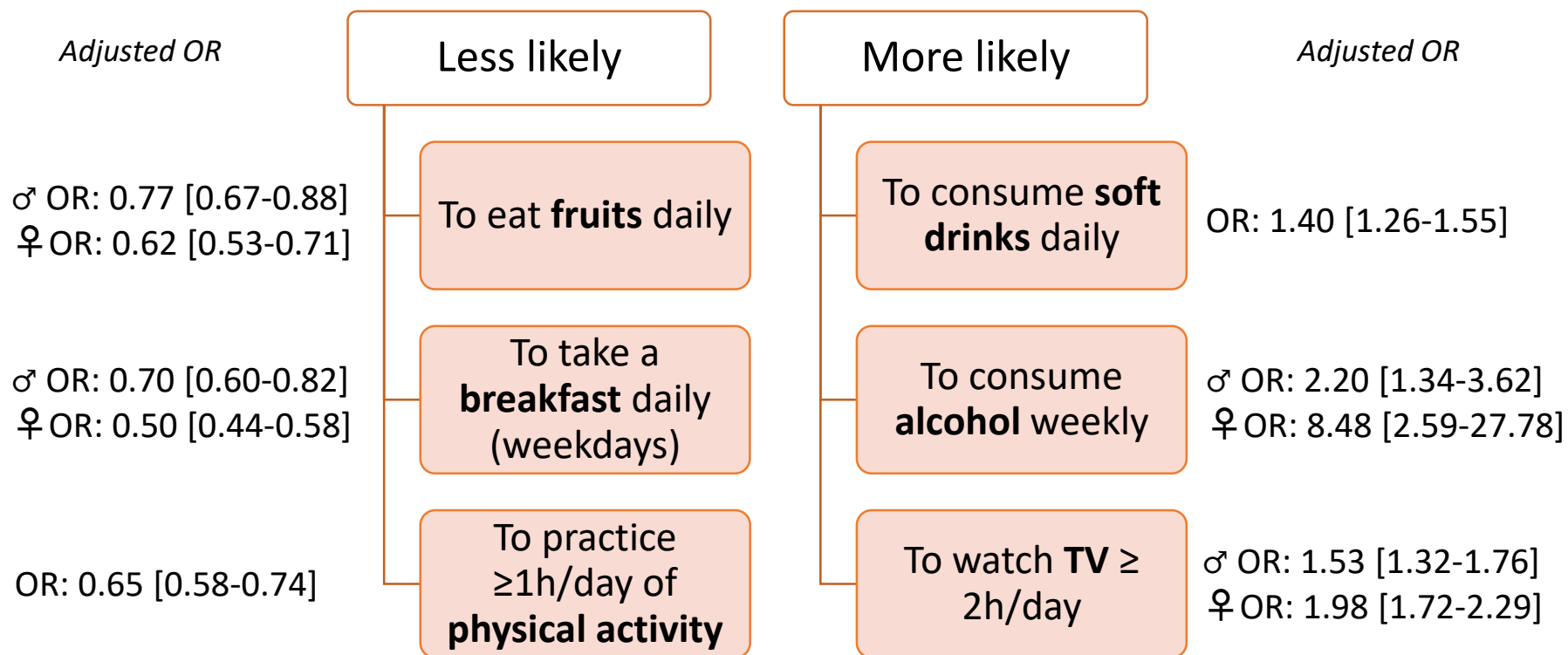
Interactions *Sex * School level* were also tested

Three types of indicators were studied



Health behaviours deteriorated between end-primary and secondary school...

Compared with end-primary school, adolescents of 1st and 2nd secondary school were:

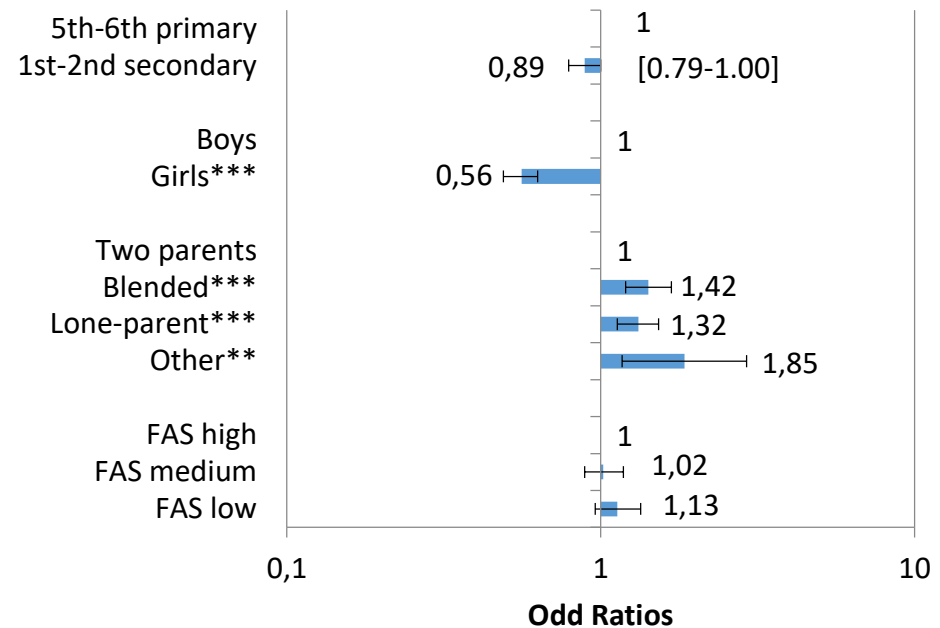


...excepted the indicators related to **violence**

E.g. the likelihood of being **victim of bullying**:

- Remains **stable** between the end of primary and the beginning of secondary school

Victims of bullying (n=6,372)



Three types of indicators were studied

Health behaviours

Food habits, physical activity, screen time, alcohol consumption, violence

Health outcomes

Self-rated health, mental health, obesity

Social context

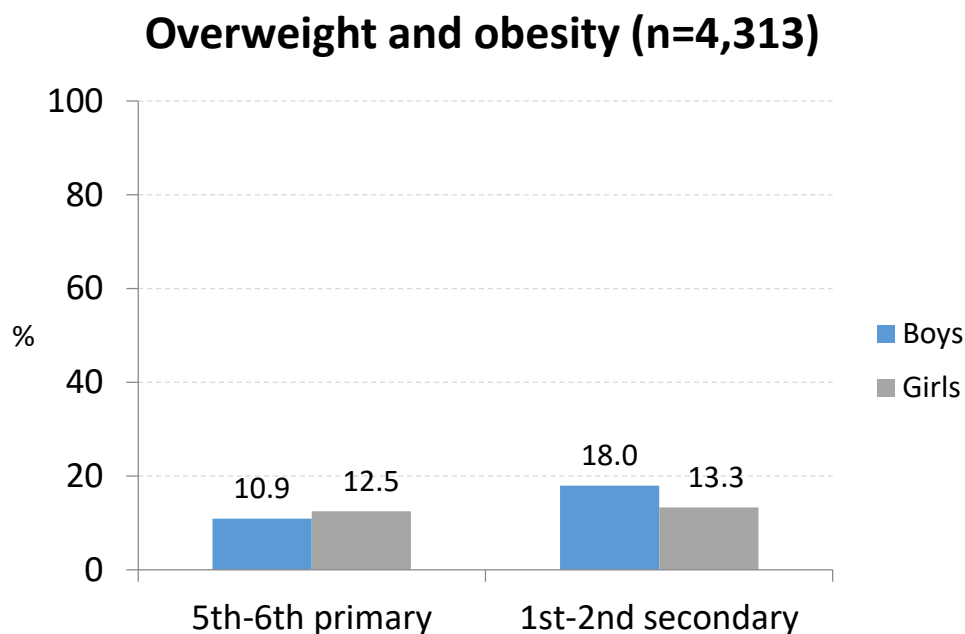
Relationships with family, peers, school

Well-being indicators

		Boys		Girls	
		Prevalence	OR* [CI 95%]	Prevalence	OR* [CI 95%]
Low health-related quality of life	5 th -6 th primary (n=2,977)	7.5%	Ref.	10.5%	Ref.
	1 st -2 nd secondary (n=3,937)	12.0%	1.58*** [1.23-2.02]	22.4%	2.31*** [1.87-2.84]
High self-confidence (often/always)	5 th -6 th primary (n=3,042)	73.2%	Ref.	54.3%	Ref.
	1 st -2 nd secondary (n=4,027)	70.7%	0.91 [0.78-1.06]	45.2%	0.70*** [0.60-0.80]
Negative body image (a bit/much too fat)	5 th -6 th primary (n=3,029)	25.5%	Ref.	35.2%	Ref.
	1 st -2 nd secondary (n=4,031)	30.8%	1.30** [1.11-1.52]	47.1%	1.61*** [1.39-1.86]

*Adjusted OR

Overweight and obesity



Logistic regressions confirmed that:

- In **boys**, adolescents of 1st-2nd secondary school are more likely than end-primary students to be overweight or obese (AOR: 1.83*** [1.41-2.39])
- This difference is not observed in **girls** (AOR: 0.97 [0.74-1.27])

Methodology

- Use of self-reported height/weight
- Use of IOTF age- and sex-specific cut-offs
- High amount of missing data (39.6%)

Three types of indicators were studied

Health behaviours

Food habits, physical activity, screen time, alcohol consumption, violence

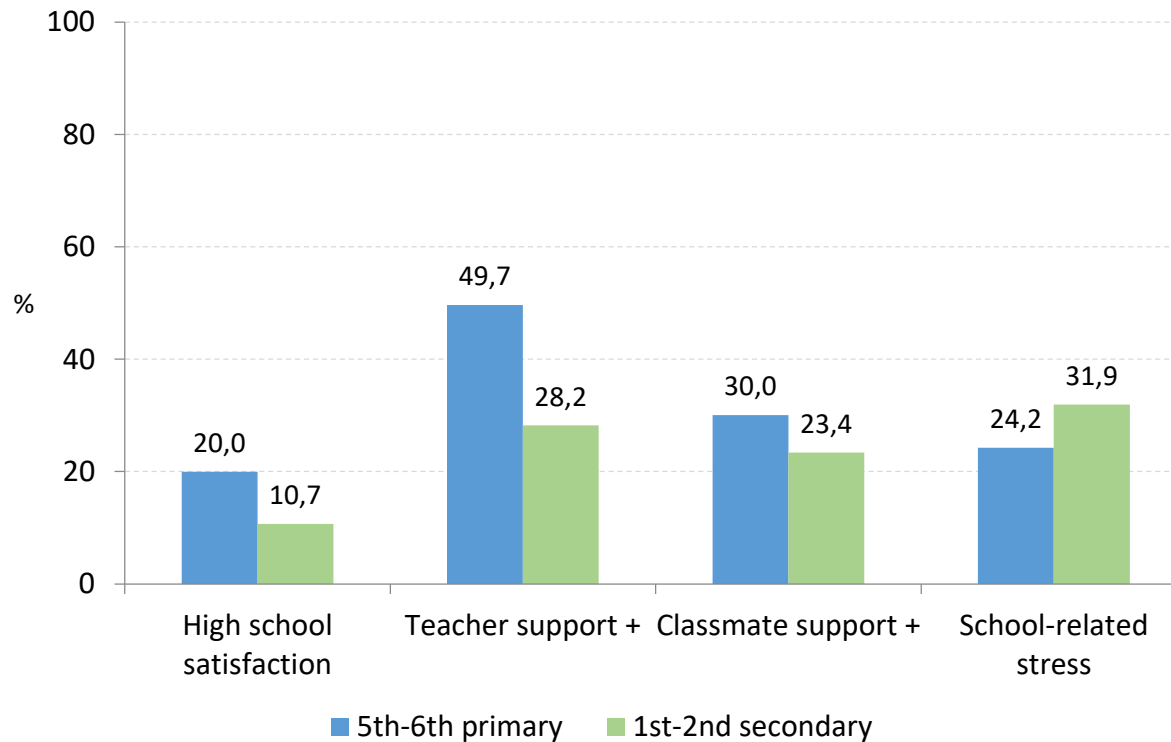
Health outcomes

Self-rated health, mental health, obesity

Social context

Relationships with family, peers, school

The perception of the school context deteriorates during this transition



→ These trends were confirmed after adjustment, using logistic regressions

In conclusion

These analyses showed that:

- A lot of health indicators (behaviours, outcomes and social context) **deteriorates** between end-primary and secondary school
 - A few indicators **remain stable** (e.g victim of bullying, perceived family support) or **improve** (e.g physical fighting)
 - Evolution patterns may differ between boys and girls
- Sensitive period during which **multi-dimensional** (behaviours, mental health, ...) and **interdisciplinary** (school, family, health actors) approaches are needed