

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

## What is changing between primary and secondary school?

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# 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 targetted 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

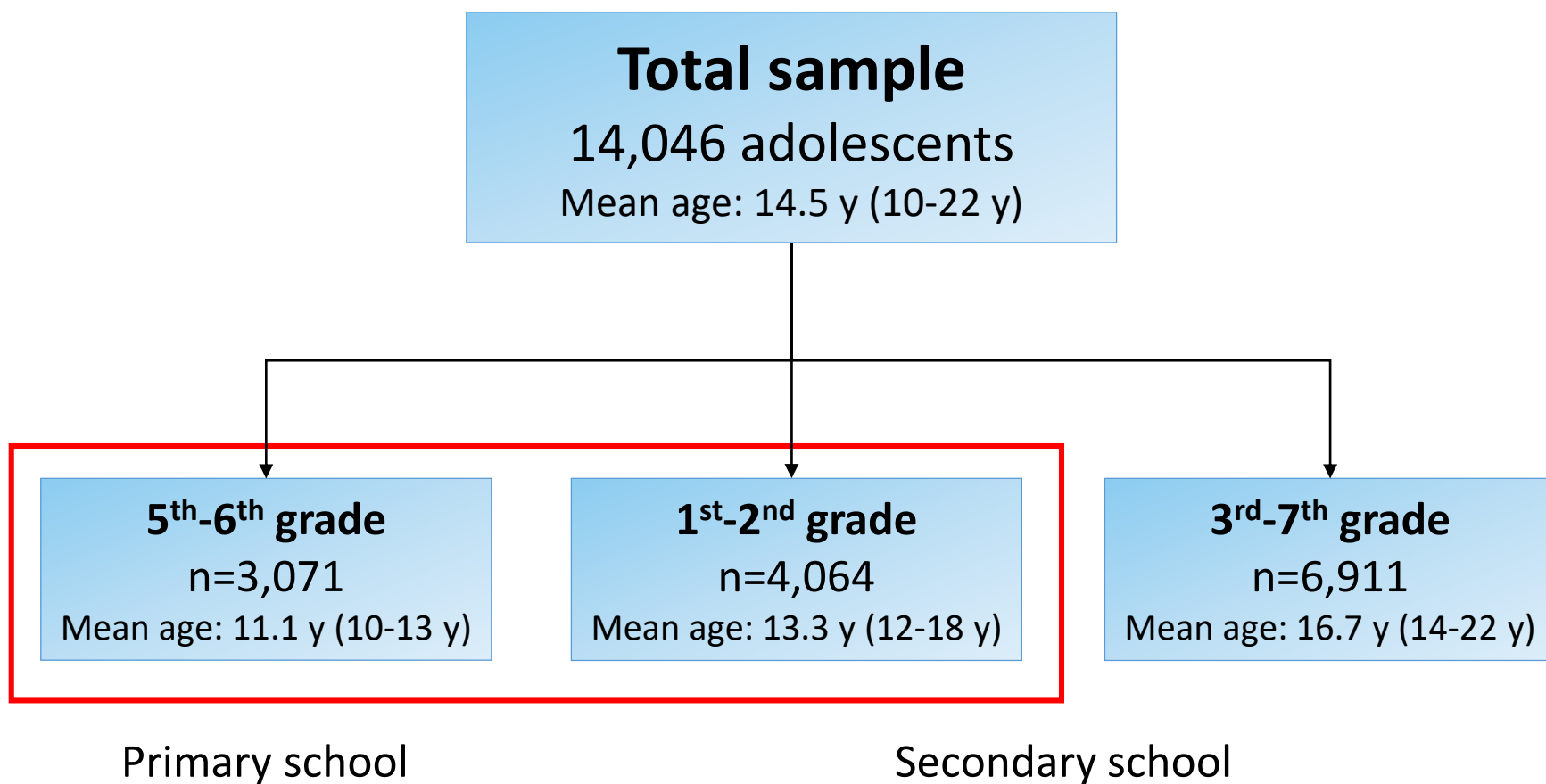
**→ 2014 HBSC survey in French-speaking Belgium**

# Methodology

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

- Data collected among adolescents from the 5<sup>th</sup> 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



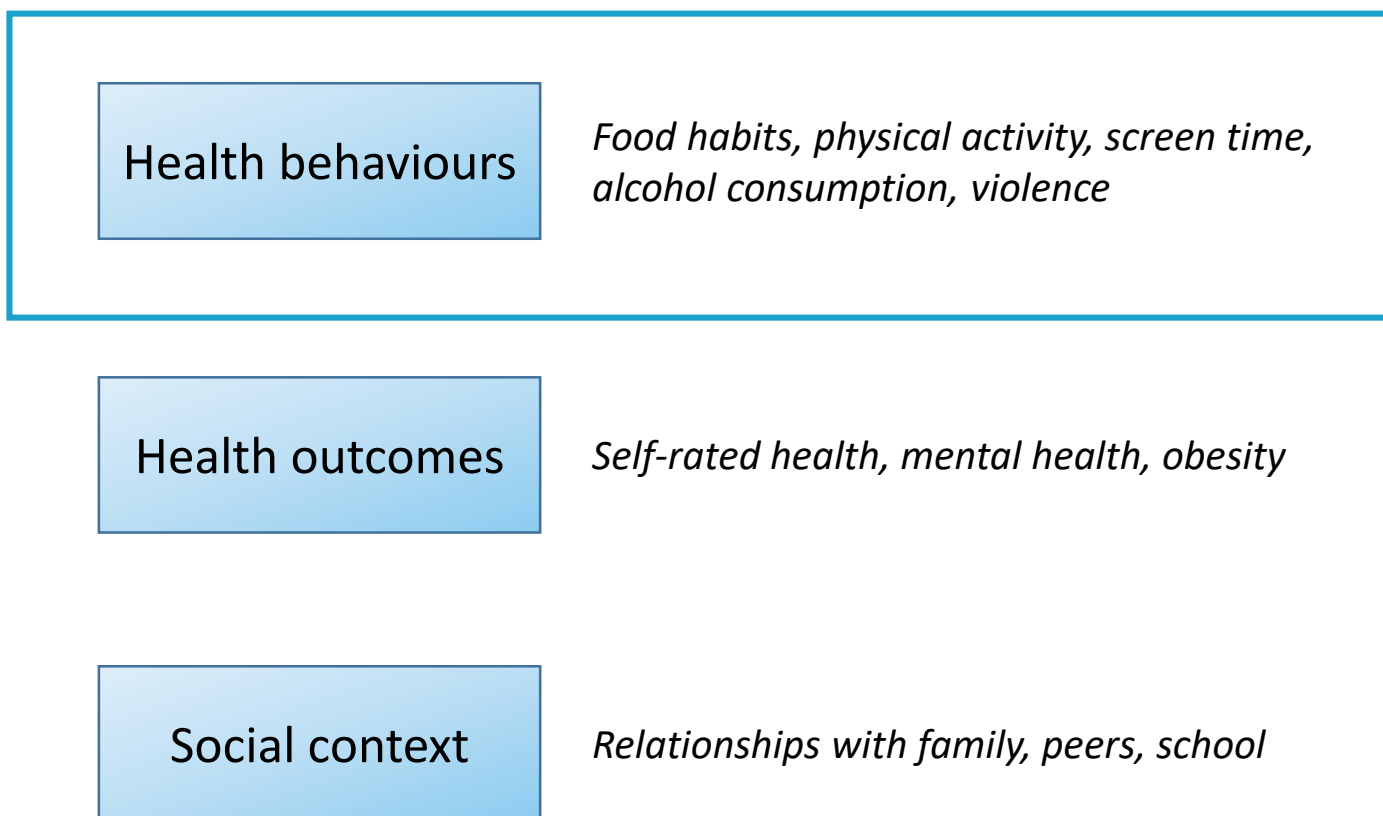
# Analyses

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

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

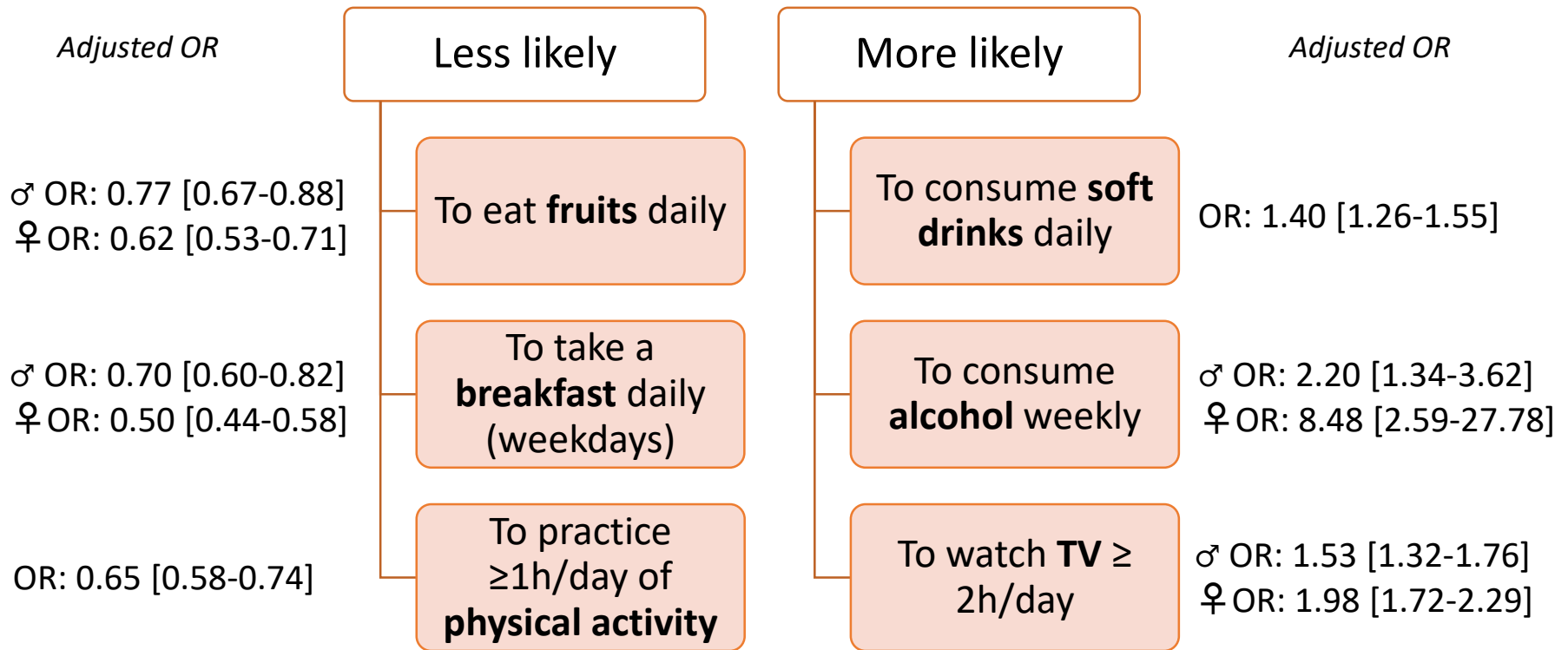
**Interactions** *Gender \* School level* were also tested

# Three types of indicators were studied



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

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



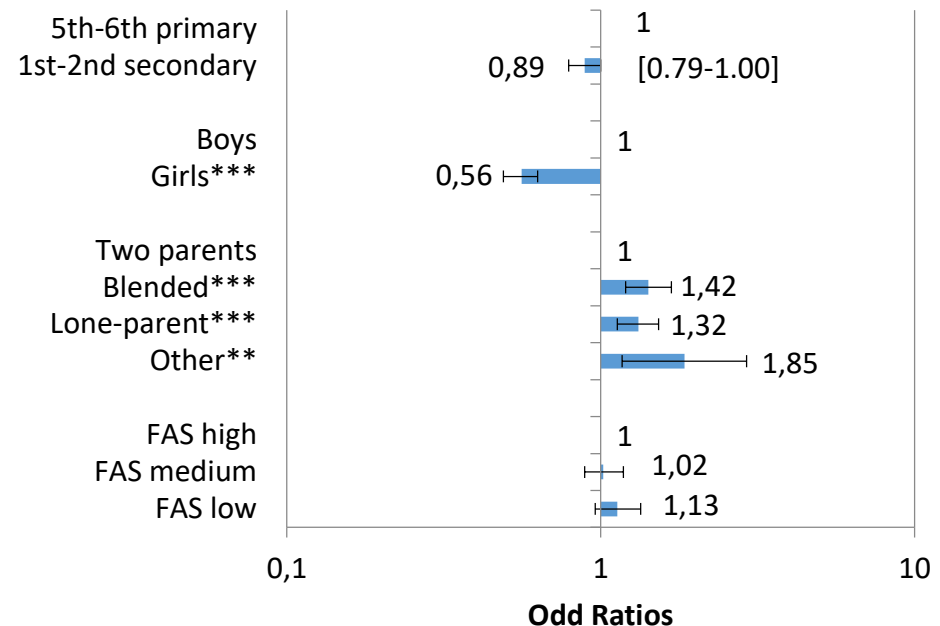


...excepted the indicators related to **violence**

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

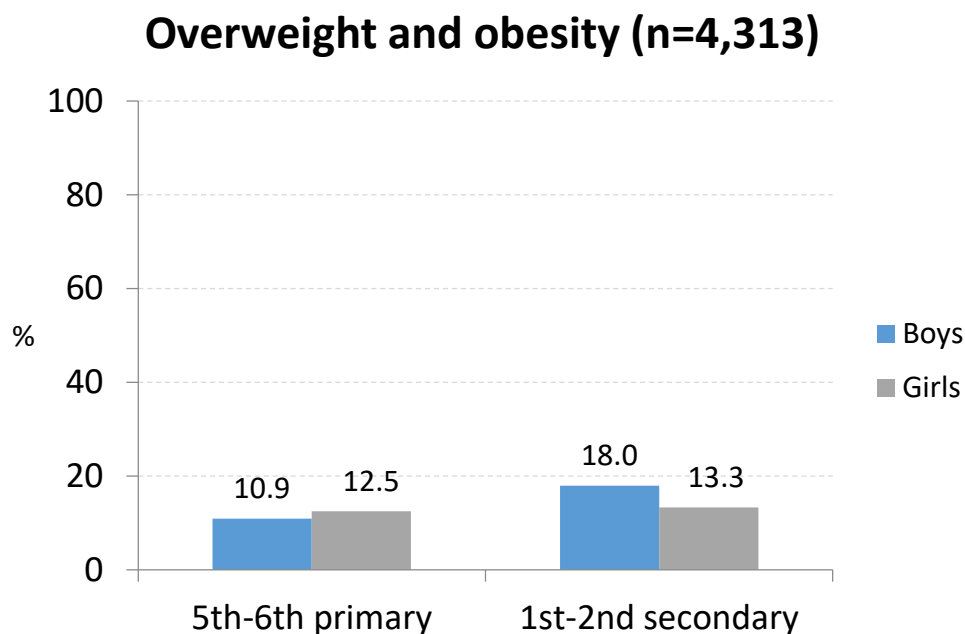
*Relationships with family, peers, school*

# Well-being indicators

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

\*Adjusted OR

# Overweight and obesity



Logistic regressions confirmed that:

- In **boys**, adolescents of 1<sup>st</sup>-2<sup>nd</sup> 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*

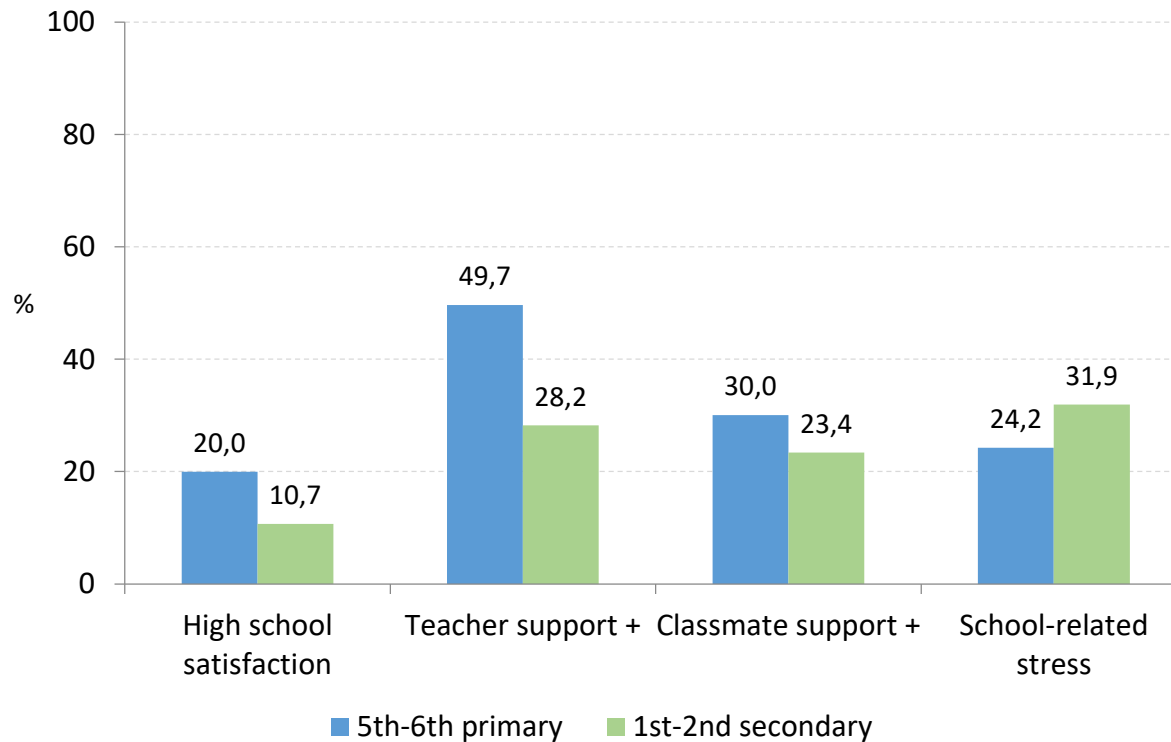
Health outcomes

*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