

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

Migration status and health and behaviours in children schooled in Brussels

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Context & Objectives



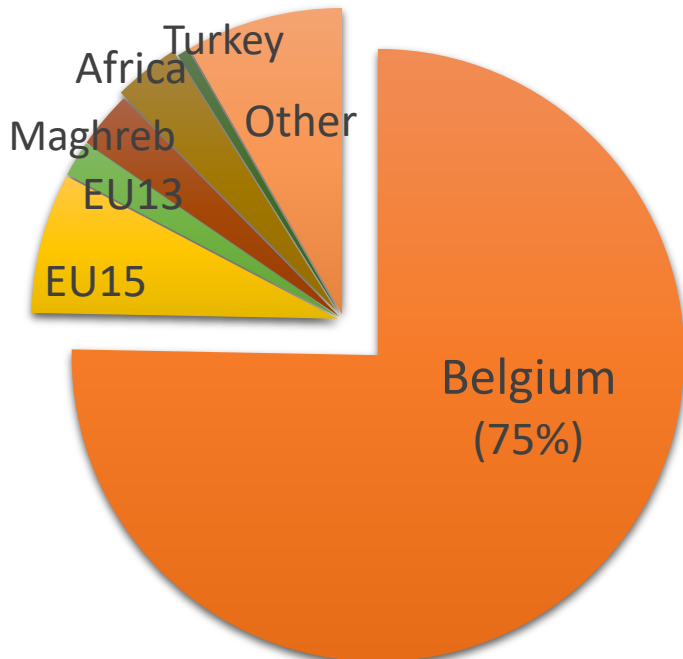
- In Brussels, 2 persons out of 3 have a migration background
 - Immigrant children face unique challenges that may impact their health on a long term
- To compare **health indicators** between adolescents with different **migration backgrounds**
- To analyse the association between **migration status** and **overweight**

Health Behaviour in School-aged children Survey (HBSC)

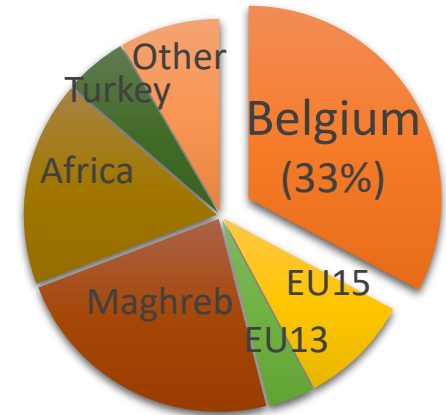
- Aims to describe well-being, health behaviours and outcomes of adolescents & sociodemographic determinants
 - >40 countries in Europe and N-America, every 4 years
 - HBSC 2014 in **French-speaking Belgium** (Wallonia+Brussels):
 - From 5th of primary to last year of secondary school
 - 2-stage cluster sampling : Schools >Classes >Students
 - Standardised questionnaires: self-administrated in class
- Sample=2,962 students from 29 schools in Brussels

Migration status

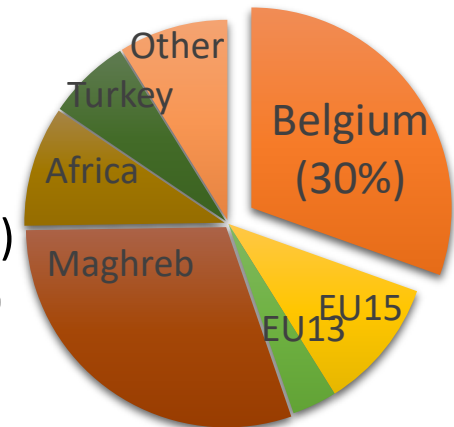
Country of birth



Mother's country of birth



Father's country of birth



- Born abroad (M1; n=667)
- Born in BE with both parents born abroad (M2; n=1029)
- Born in BE with one parent born abroad (M1.5; n=623)
- Born in BE with both parents born in BE (M0; n=553)

Statistical Methods

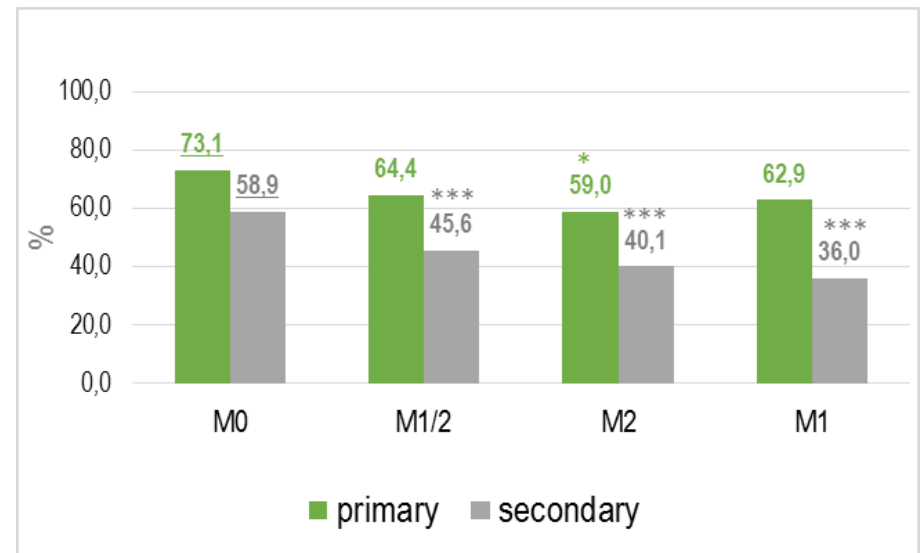
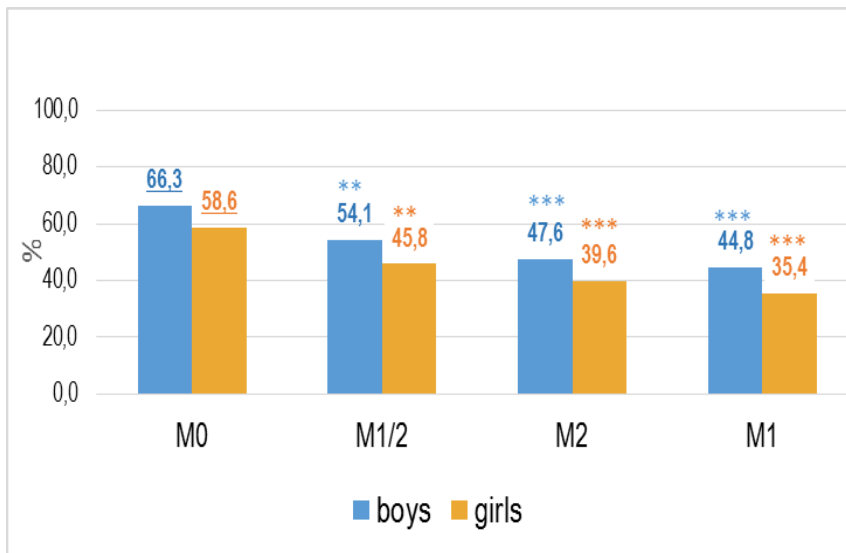
➤ **Descriptive analyses of health indicators**

Simple logistic regression models

- Dependent variable: Health indicator
- Independent variable: Migration status (ref=born in BE & both parents born in BE)
- Stratification for gender and school level

Health behaviours (1)

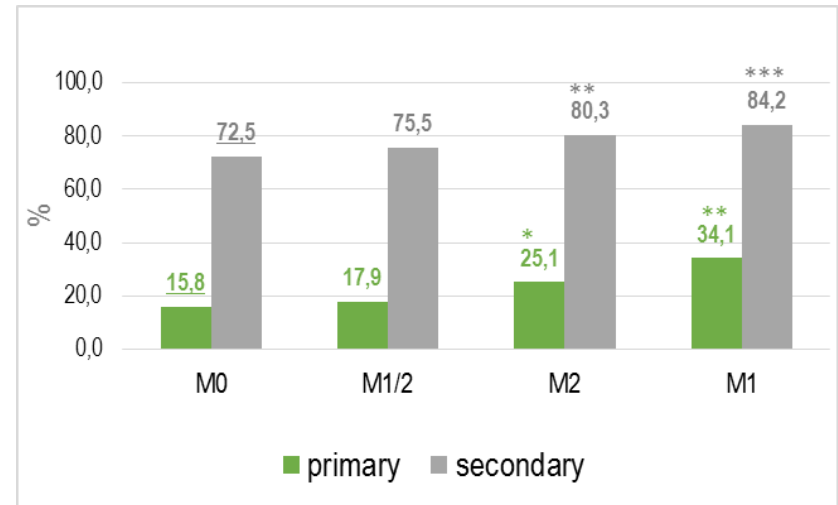
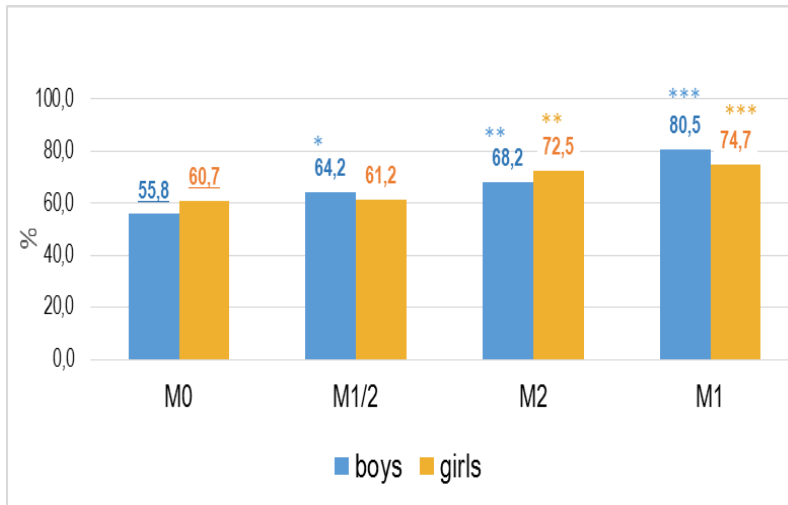
- Eating behaviour: e.g., Daily breakfast consumption



→ Same pattern for daily **family dinner**, **vegetables**, visit to the **dentist** and **practice sport** (girls M2)

Health behaviours (2)

- **Sleeping <9 hours/night**



- Same pattern for **fast-food, soft-drinks, crisps/fries, weekly fish, screen time** and **weight control dieting**
- But no difference for **daily fruits, water** and **physical activity**

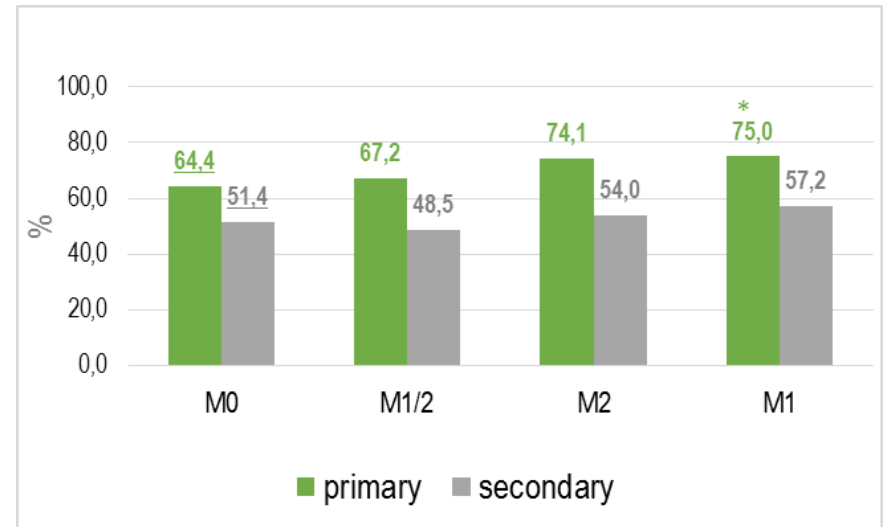
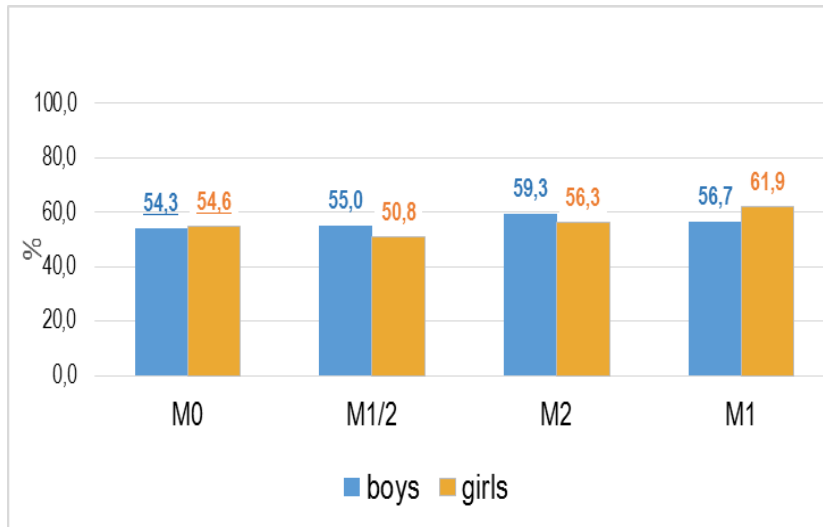
Risk behaviours

- Adolescents with a migration background are:

Less prone to	More prone to
To engage in sexual intercourse	Fight (boys)
To drink	Be bullied (primary M1)
To use cannabis	Be cyberbullied (boys M1.5)
To smoke (girls M1)	
To use other illegal drugs (girls M2)	

School and social context

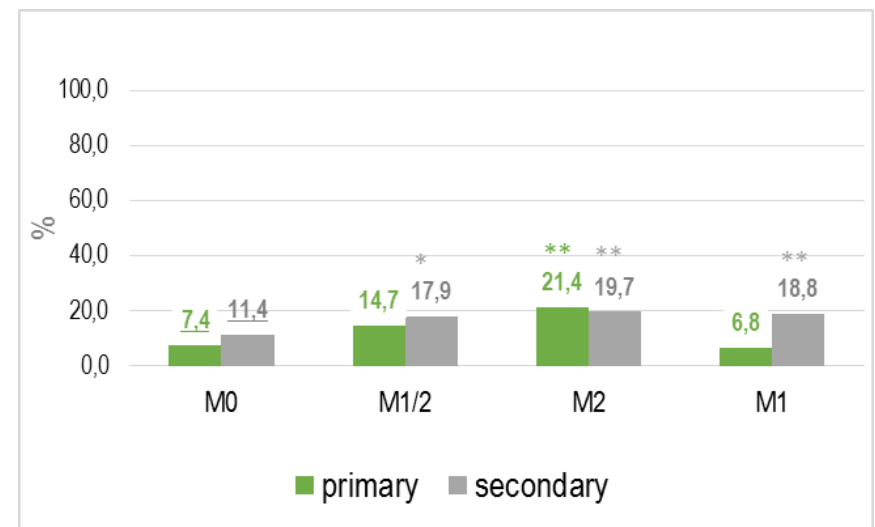
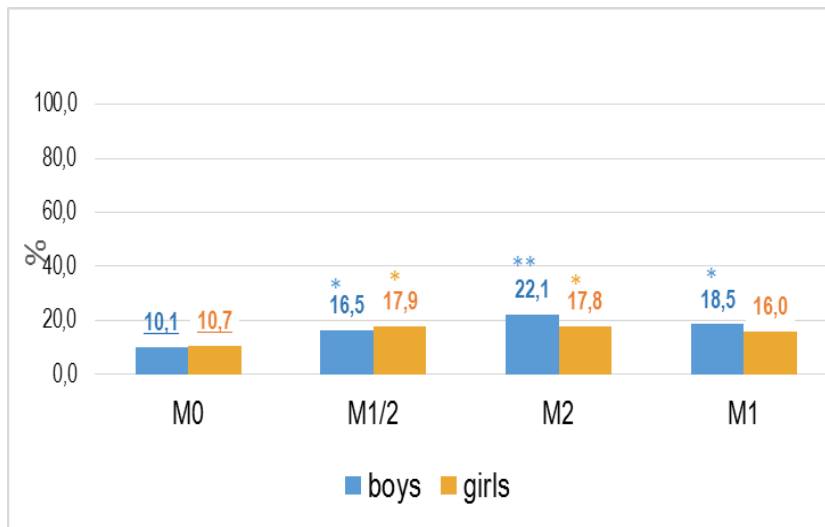
- **Liking school**



→ **No difference** either for perceived **school performance**, **classmates' relationships** and **quality of family communication**

Health and well-being

- **Overweight** (International Obesity Task Force (IOTF) age/gender specific cut points corresponding to adult BMI of 25 kg/m²)



→ But no difference for self-rated health, multiple health complaints, life satisfaction and health-related quality of life

Statistical Methods

➤ Association Overweight-Migration status

Consecutive multivariable logistic regression models

- Dependent variable: Overweight status (IOTF cut points for adult BMI of 25)
- Independent variable: Migration status
- Adjustment variables:
 - Model 0: **Gender+age**
 - Model 1: Gender+age+**socio-demographic variables**
 - Model 2: Gender+age+socio-demographic variables+**health behaviours**

Overweight & Migration status (1)

	Model 0
Migration status (vs born in BE, parents too)	
Born in BE with 1 parent born abroad	1.76 (1.16-2.65)
Born in BE with 2 parents born abroad	2.06 (1.41-3.02)
Born abroad	1.69 (1.12-2.56)
Gender (girl vs boy)	0.89 (0.70-1.15)
Age (vs 10-11 years)	
12-13	1.46 (0.88-2.42)
14-15	1.61 (0.98-2.65)
16-18	1.22 (0.75-1.98)
19-22	1.86 (1.10-3.15)

Overweight & Migration status (2)

	Model 0	Model 1
Migration status (vs born in BE, parents too)		
Born in BE with 1 parent born abroad	1.76 (1.16-2.65)	1.80 (1.18-2.76)
Born in BE with 2 parents born abroad	2.06 (1.41-3.02)	1.90 (1.27-2.85)
Born abroad	1.69 (1.12-2.56)	1.39 (0.88-2.21)
Gender (girl vs boy)	0.89 (0.70-1.15)	0.88 (0.67-1.15)
Age (vs 10-11 years)		
12-13	1.46 (0.88-2.42)	1.28 (0.75-2.19)
14-15	1.61 (0.98-2.65)	1.31 (0.77-2.23)
16-18	1.22 (0.75-1.98)	1.05 (0.62-1.78)
19-22	1.86 (1.10-3.15)	1.66 (0.94-2.93)
Family affluence scale (vs high)		
Medium		1.18 (0.83-1.68)
Low		1.55 (1.10-2.28)
Language at home (other vs flemish/french)		2.15 (1.37-3.38)

Overweight & Migration status (1)

	Model 0	Model 1	Model 2
Migration status (vs born in BE, parents too)			
Born in BE with 1 parent born abroad	1.76 (1.16-2.65)	1.80 (1.18-2.76)	1.56 (0.98-2.46)
Born in BE with 2 parents born abroad	2.06 (1.41-3.02)	1.90 (1.27-2.85)	1.79 (1.15-2.76)
Born abroad	1.69 (1.12-2.56)	1.39 (0.88-2.21)	1.19 (0.72-1.97)
Gender (girl vs boy)	0.89 (0.70-1.15)	0.88 (0.67-1.15)	0.91 (0.68-1.21)
Age (vs 10-11 years)			
12-13	1.46 (0.88-2.42)	1.28 (0.75-2.19)	1.02 (0.58-1.83)
14-15	1.61 (0.98-2.65)	1.31 (0.77-2.23)	1.05 (0.58-1.92)
16-18	1.22 (0.75-1.98)	1.05 (0.62-1.78)	0.72 (0.39-1.34)
19-22	1.86 (1.10-3.15)	1.66 (0.94-2.93)	1.14 (0.58-2.22)
Family affluence scale (vs high)			
Medium		1.18 (0.83-1.68)	1.09 (0.75-1.57)
Low		1.55 (1.10-2.28)	1.42 (0.97-2.09)
Language at home (other vs flemish/french)		2.15 (1.37-3.38)	1.81 (1.09-3.02)
Breakfast (not daily vs daily)			1.43 (1.05-1.93)
Vegetables (<1x/d vs ≥1x/d)			1.04 (0.78-1.39)
Fish (<2x/w vs ≥ 2x/w)			1.24 (0.92-1.67)
Sleep (<9 h/d vs ≥ 9 h/d)			1.42 (0.96-2.11)
Alcohol use (≥1x/w vs <1/w)			0.67 (0.32-1.39)

To conclude

- **More unhealthy behaviors** (eating, physical activity...) among migrant adolescents
 - **Risk behaviors: Less** sexual, alcohol... but **more** fighting, bullying...
 - **No difference** for most **school, social context** and **health status** indicators... < Except for **overweight**
 - Association between migration and overweight partially mediated by differences in **socioeconomic context** and **health behaviours**
- → **Schools=opportunity to reduce such inequalities**
- → Taking into account **plural cultural identity** along with **socioeconomic conditions**



