



Health Behavior in School Children Survey

Selected International Findings on Substance Use

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SU Data Collected in HBSC

Substance Use Variables

- Smoking: daily, weekly, monthly
- Drinking: daily, weekly, monthly x beverage
- Cannabis: monthly, yearly
- Drugs: cocaine, ecstasy, amphetamines, opiates, other (10th grade only)

SU Data Collected in HBSC

Respondent Characteristics

- Age
- Sex
- Race
- Region

Research Questions of Interest

1. What are the patterns of substance use by age, sex, race, geography?
2. How does use in the USA compare with use in other countries?
3. How have substance use patterns changes over time?

Why is information on adolescent substance use important?

1. Monitoring of prevalence
2. Trends in use over time
3. Policy considerations

Example #1: Cross-national Comparison of Drinking and Marijuana Use in the USA, Canada, Netherlands

Purpose: examine differences in SU in three countries

Background: SU policies vary greatly in these three countries

Method: examine policies and 10th grade drinking, drunkenness, and cannabis use in three countries

Alcohol Policies in Three Countries

Policy (1-3range)	USA		Canada		Netherlands	
	Policy	Policy Score	Policy	Policy Score	Policy	Policy Score
Alcohol						
Legal Age**	21	3	19	2	16	1
Possession criminal?*	Yes	2	No	1	No	1
Consumption criminal?*	Most states	2	No	1	No	1
Purchase criminal?*	Yes	2	Yes	2	No (fine)	1
Jurisdiction of legislation**	Federal; state; local	3	Federal; Provincial	2	Federal	1
<i>Subtotal</i>		12		8		5

*Yes – 2; No = 1

**Countries ranked 1 (least strict) to 3 (most strict)

Cannabis Policies in Three Countries

Policy (1-3range)	USA		Canada		Netherlands	
	Policy	Policy Score	Policy	Policy Score	Policy	Policy Score
Cannabis						
Minimum Age*	None	2	None	2	18	1
Possession criminal?*	Yes ^b	2	No	1	No	1
Consumption criminal?*	Some states	2	No	1	No	1
Purchase criminal?*	Yes	2	Yes	1	Yes ^c	1
Leg Jurisdiction?**	State, Fed	3	Federal	2	Local; Fed	1
		11		7		6

*Yes – 2; No = 1

**Countries ranked 1 (least strict) to 3 (most strict)

Overall Policy Scores

Policy (1-3range)	USA		Canada		Netherlands	
	Policy	Policy Score	Policy	Policy Score	Policy	Policy Score
Alcohol		12		8		5
Cannabis		11		7		6
TOTAL		23		15		12

Prevalence

Indicator	USA (750)		Canada (900)		Netherlands (680)	
Monthly Alcohol Use						
% Users (SE)	34.0%	(1.7)	44.2%	(1.6)	67.9%	(1.8)
Rate Ratio	1.0	----	1.30	(1.11-1.53)	2.0	(1.73-2.31)
Frequent Drunkenness						
% Users (SE)	27.7%	(1.6)	38.9%	(1.6)	38.3%	
Rate Ratio	1.0	----	1.41	(1.17-1.70)	1.38	(1.14-1.68)
30-day Cannabis Use						
% Users (SE)	21.4%	(1.5)	20.0%	(1.3)	18.8%	(1.5)
Rate Ratio	1.0	----	.94	(.73-1.20)	.88	(.67-1.15)

Conclusions About Policy and Prevalence

1. Strict USA alcohol policies consistent with low alcohol prevalence
2. Strict USA cannabis policies not consistent with prevalence
3. Benefits must consider the social consequences of strict policies, including legal involvement and incarceration
4. Few other cross-national comparisons of policy and prevalence available

Example #2: Multi-national Trends in Alcohol Use Among 10th Graders

Purpose: examine trends in prevalence 1998-2006

Background: Alcohol use may vary across countries and over time

Method: Compare monthly drinking over time among 10th graders in HBSC countries

Countries with An Increase in Monthly Alcohol Use (10th Grade)

	1998	Total 2002	2006
Austria	53.2	43.4	56.5
Belgium	51.8	45.3	55.2
Czech Republic	46.2	55.2	54.9
Estonia	39.9	41.0	46.2
Hungary	32.1	47.9	46.3
Latvia	37.8	35.3	52.0
Lithuania	31.1	36.4	40.9
Switzerland	32.6	42.4	41.0
UK	59.0	65.0	62.2
Weighted average	47.0	48.7	53.1

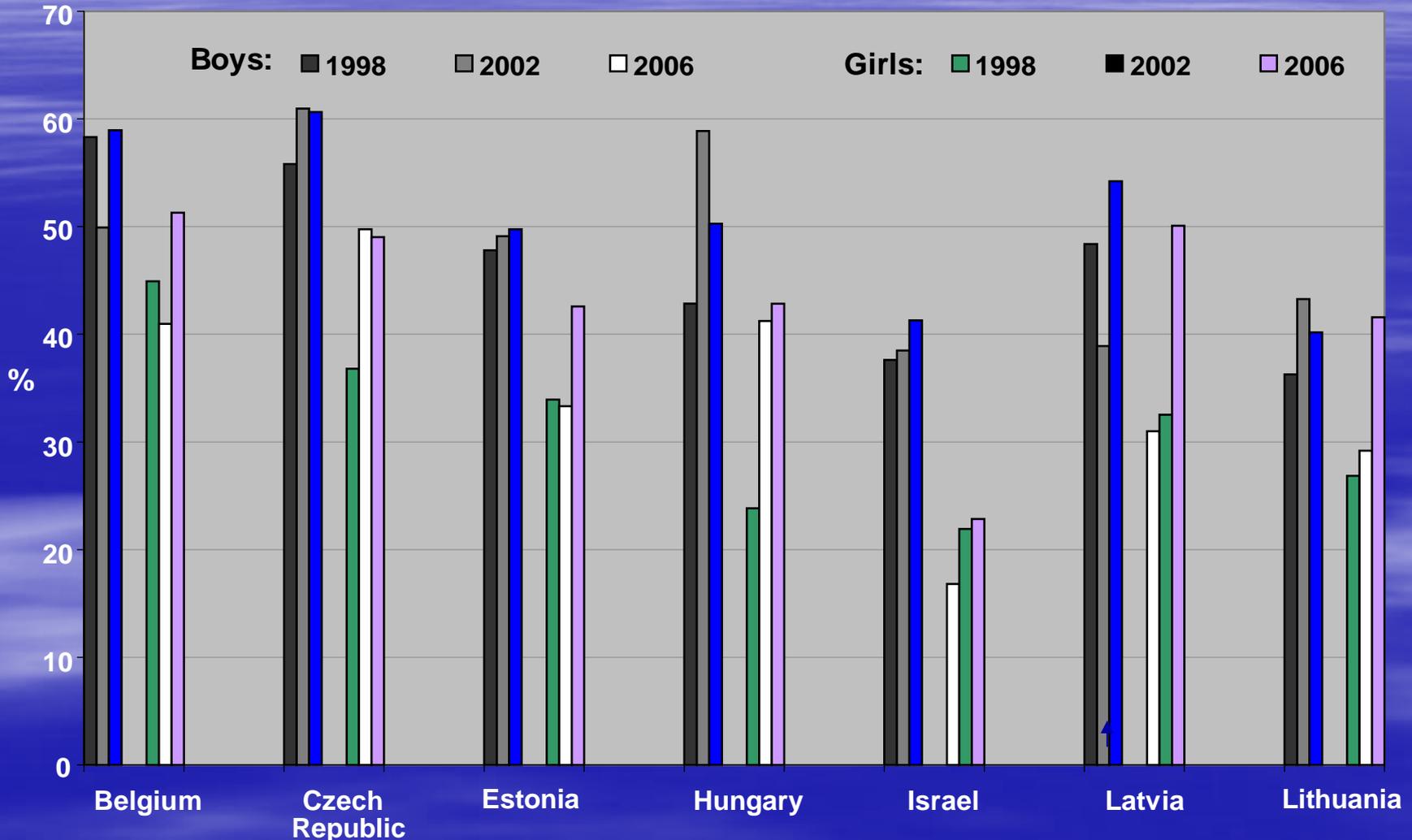
Countries With No Increase or Decrease in Monthly Alcohol Use (10th grade)

Country	Total		
	1998	2002	2006
Canada	43.1	45.8	41.9
France	42.4	32.5	40.2
Greenland	28.8	29.8	30.4
Israel	26.4	29.4	30.00
Poland	30.9	31.1	29.3
Portugal	26.7	30.4	27.5
Weighted average	35.6	33.2	32.1

Countries with An Overall Decrease in Monthly Alcohol Use (10th Grade)

	1998	Total 2002	2006
Denmark	74.0	72.5	60.6
Finland	41.3	39.0	36.9
Germany	50.3	50.1	42.0
Greece	67.5	47.8	51.3
Ireland	44.7	28.0	36.1
Norway	38.6	43.5	31.2
Russian Federation	54.9	43.3	41.2
Sweden	41.2	36.3	28.8
US	36.8	27.3	28.1
Weighted average	48.9	43.4	39.9

Countries with Increased Alcohol Use Among 10th Grade Girls, not Boys



Example 2: Conclusions About Monthly Drinking Among 10th Graders

1. Drinking in the USA declined among boys and girls
2. Drinking varied over time by country
3. Drinking varied among boys and girls
4. Drinking increased among girls but not boys in some countries; in no country did boys increase and girls not increase
5. Cross-European data available from ESPAD, but data from Europe and North America available on from HBSC

Other Planned Analyses of the HBSC Substance Use Data

1. The relationship between cannabis use and time with friends
2. Trends in cannabis use from 1998-2006
3. The association between adolescent substance use and peer use and parent knowledge
4. The prevalence of substance use among urban, suburban, and rural youth in the US.

Further Information

- Full list of scientific journal articles at: <http://www.hbsc.org>
- Downloadable copies of the 2005/6 international report are available at:
http://www.euro.who.int/datapublications/Publications/Catalogue/20080616_1



Young People's Health in Context



The End

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