

# Primary prevention and community development of Planet Youth

- Iceland as demonstrative example -

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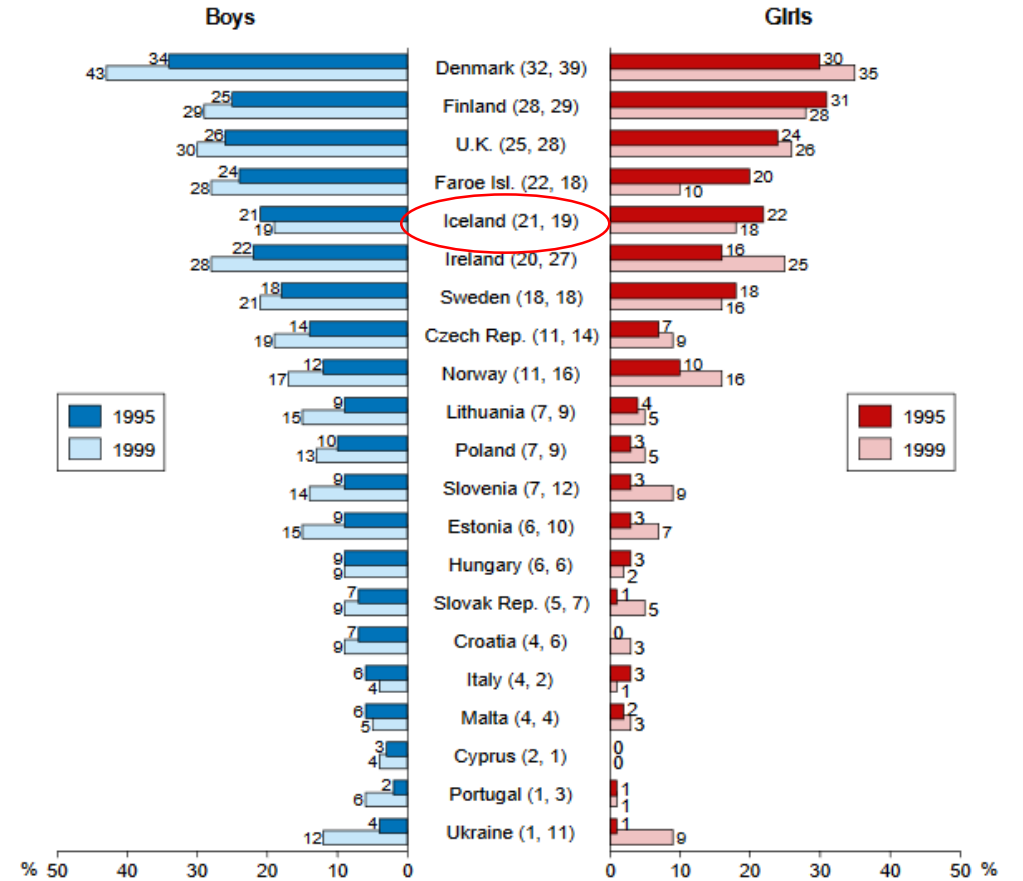
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The situation in the mid 90s

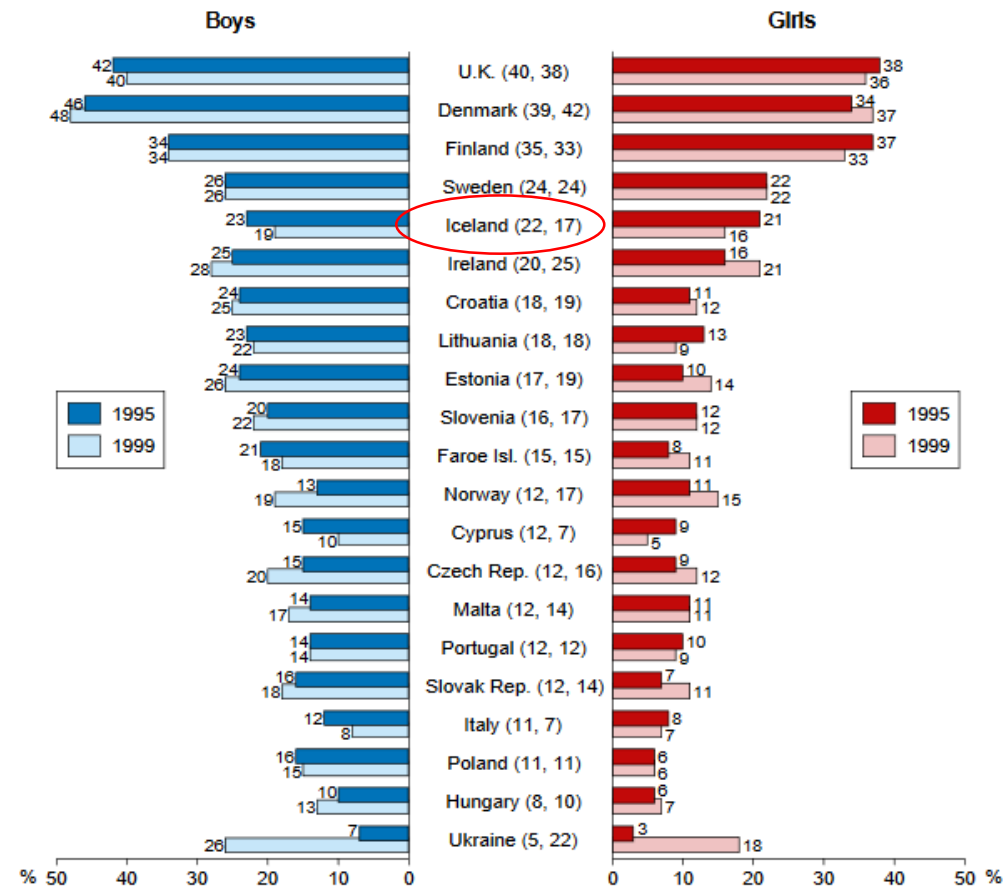
# Rates of drunkenness 1995-1999 (ESPAD 1999, 10<sup>th</sup> graders)

*Figure 14b. Changes between 1995 and 1999 in proportion of boys and girls who have been drunk 10 times or more during last 12 months (values within brackets refer to all students 1995, 1999). Data sorted by all students 1995.*



# Drunk at the age of 13 or younger, 1995-1999 (ESPAD 1999)

*Figure 17b. Changes between 1995 and 1999 in proportion of boys and girls who have been drunk at the age of 13 or younger (values within brackets refer to all students 1995, 1999). Data sorted by all students 1995.*



## REMINDER 1

Long term population changes will require long-term, population level, interventions

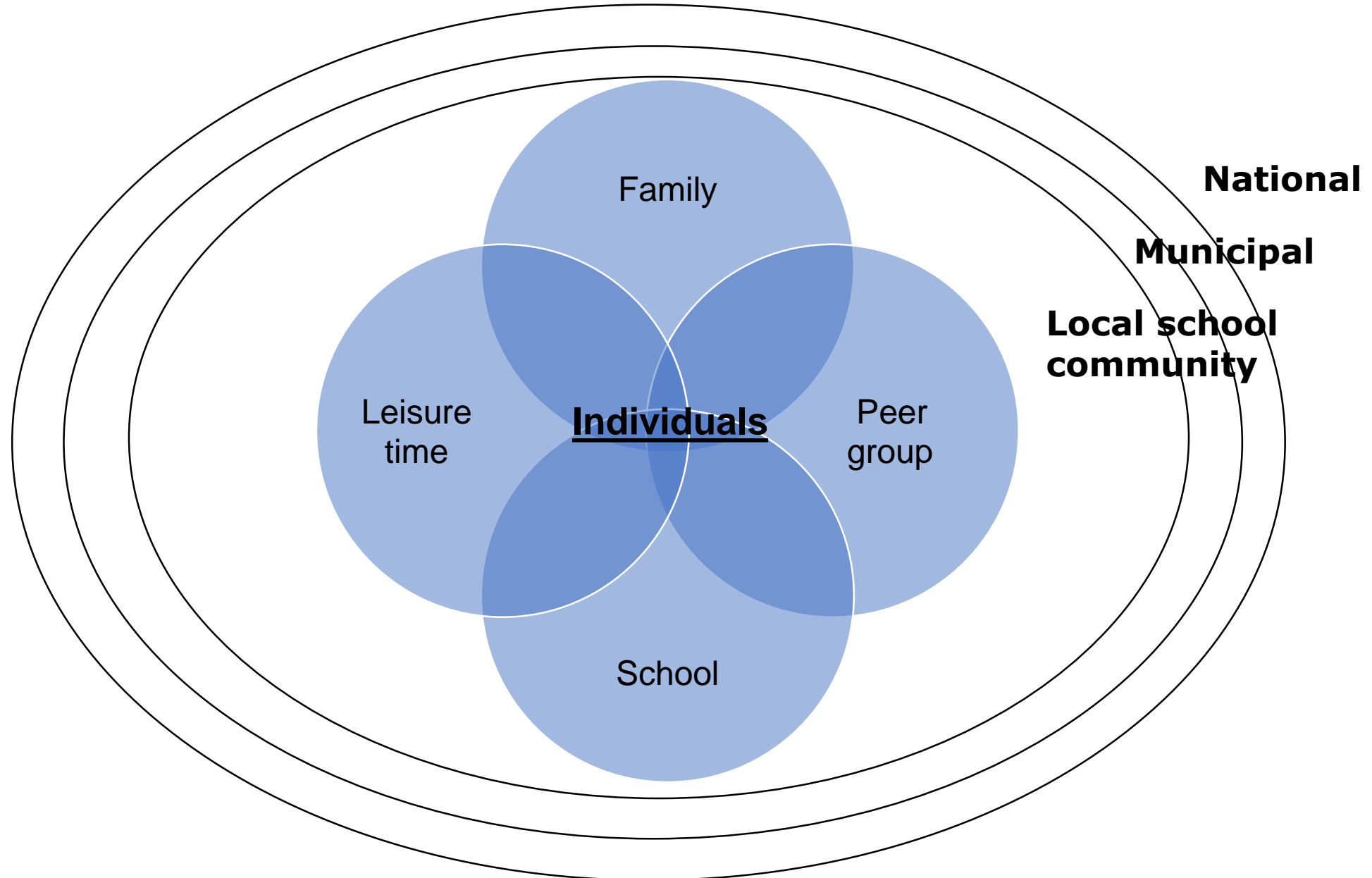
Short term, individual level interventions are appropriate to achieve short term, individual level, changes

## REMINDER 2

In a nutshell, to speed-up and integrate..



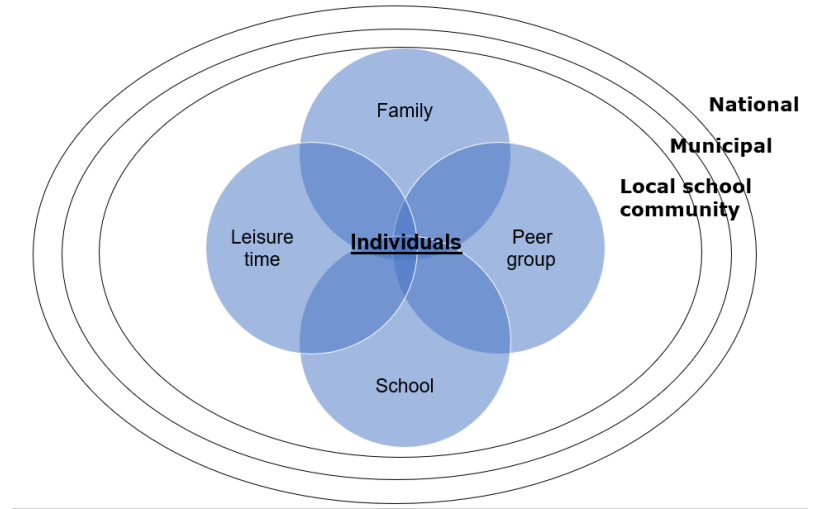
# REMINDER 3: Major domains of intervention focus



## REMINDER 4: Objective

- Long-term cultural change
- Paradigm shift

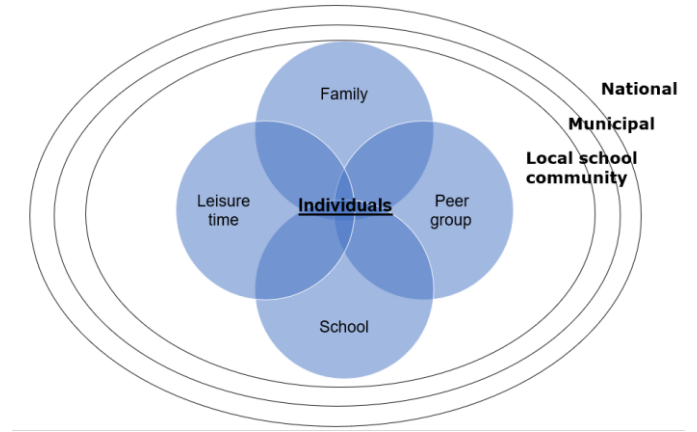
- 
- Takes time
  - Relationship building, and maintenance
  - Continuation
  - **COLLABORATION**





# Planet Youth, in Iceland: Background

- The Icelandic Educational Research Institute 1990-1998. Population surveys among adolescents
- “Drug Free Iceland 2002” program, initiated in 1997
- Prevention framework based on sociology/criminology theories of adolescent deviance (knowledge), and public health theories of action
- Collaborative effort among researchers, policy makers and practitioners in the field begins



## Reminder 5

1. Researchers do research
2. Policy makers set and enact policy
3. Practitioners apply policy based on research to practice
4. All communicate and collaborate



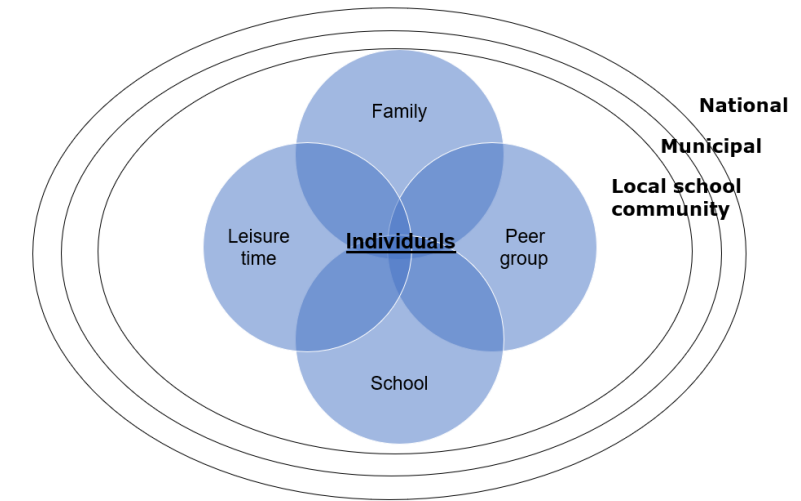
# Research - Policy - Practice

Underlining the importance of collaboration

- We can all learn from one another

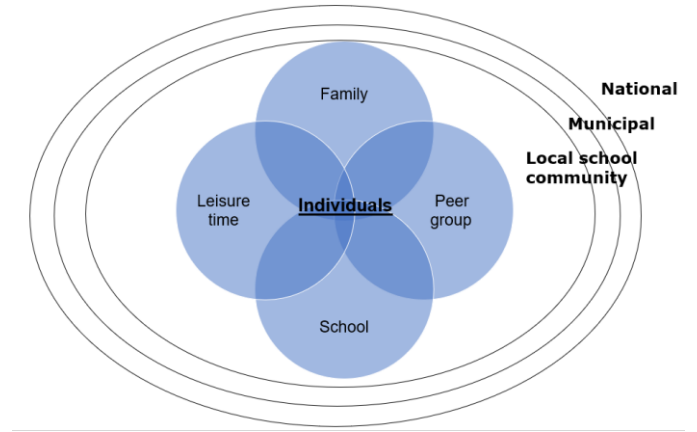
- Academics/researchers
- Policy makers
- Practitioners
- Grass-root youth workers
- Parents
- Young people

...work in dialogue...

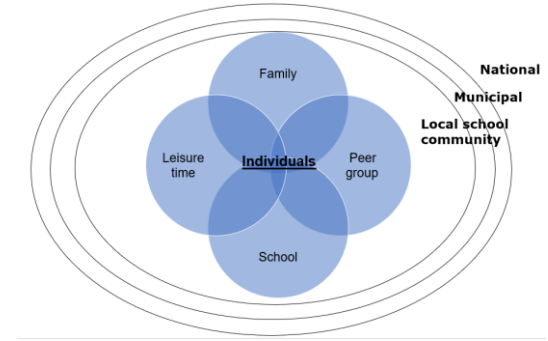


# How it works: The role and responsibilities of researchers

- Define risk and protective factors
- Collect, process and analyze data
- Write national, municipal, and school-community level reports – disseminate quickly and effectively to all
- Present and translate findings to policy-makers (incl. elected officials), administrative leaders at national, municipal and school-community levels, school faculty, prevention professionals, other relevant professionals, and parents. Recommend and discuss intervention activities at all levels
  - Lots of meetings!

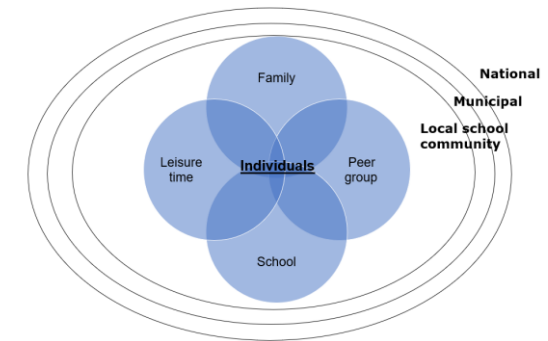


# How it works: The role and responsibilities of policy makers and administrative leaders



- Procure funding at national (i.e., Ministry-) and local (i.e. municipal) levels for:
  - Research (ICSRA contracts)
  - Local prevention personnel
  - Organized extracurricular and recreational activities for children and youth
  - Other interventions (that may be locally tailored and specific)
  - NGOs with specific focus (Home & School, Together group)
- Facilitate population-wide participation in research, through schools
- Pass laws and set directions for prevention and health promotion work

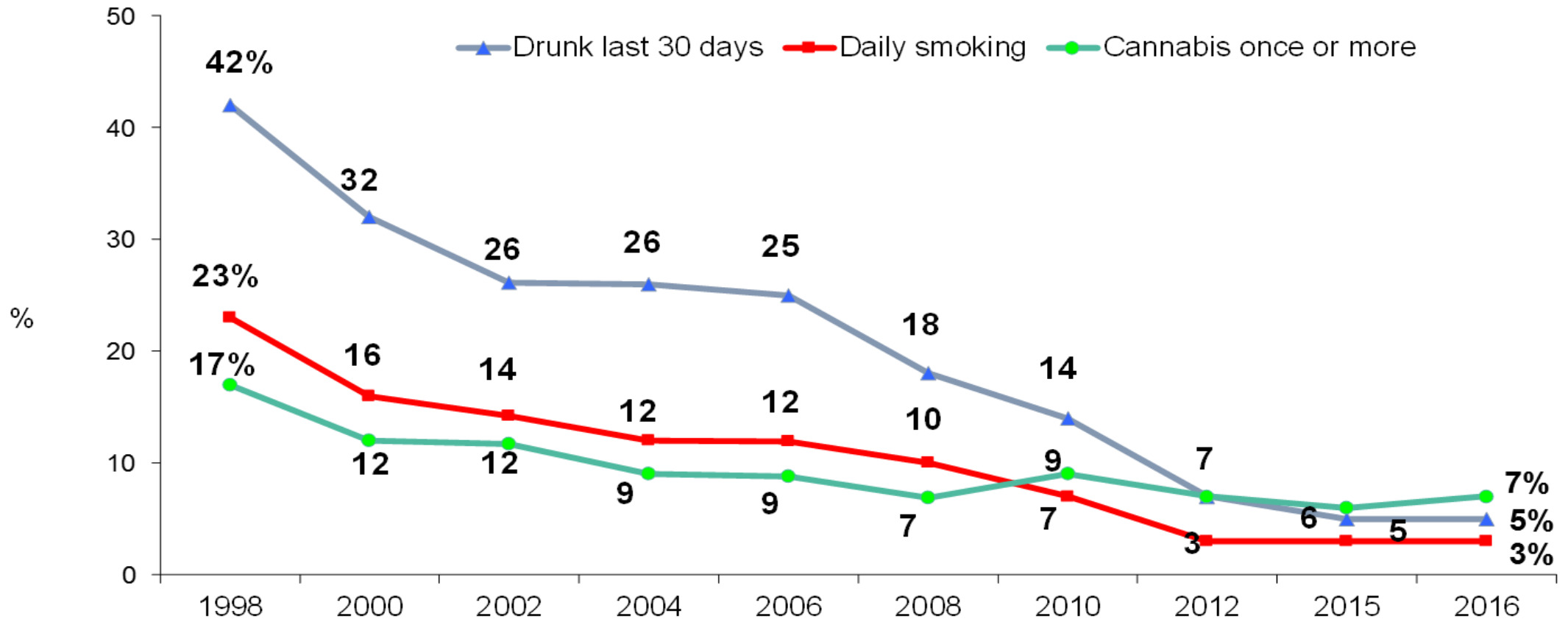
# How it works: The role and responsibilities practitioners



- Prevention specialists at municipal, district and school-community levels, youth workers, faculty and other school personnel, other professionals:
  - Organize and support parental organizations and involvement at the municipal, and school-community levels
  - Organize municipal level and/or school-community meetings with professionals and parents for the discussion of research findings
  - Assist in setting strategies and goals for the year ahead
  - Enforce/support locally-tailored interventions
  - Facilitate a dialogue with the parent-community
  - Promote participation in organized recreational- and extracurricular activities

Selected results

# Positive development over 20 years (10<sup>th</sup> grade students)





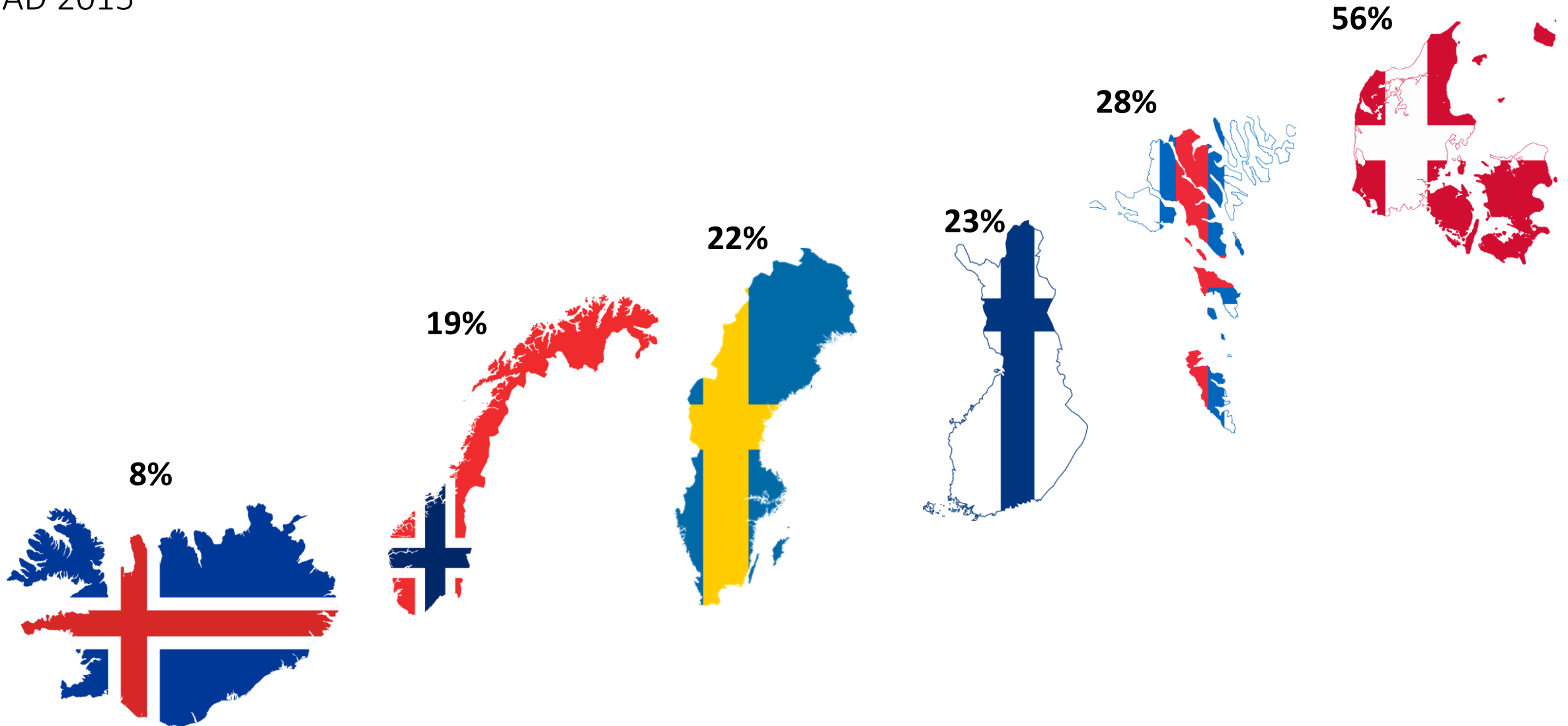
# Alcohol use, drunkenness 2015 (ESPAD 2015)

**Table 6.** Alcohol use: prevalence of lifetime use, 30-day use and intoxication (percentage)

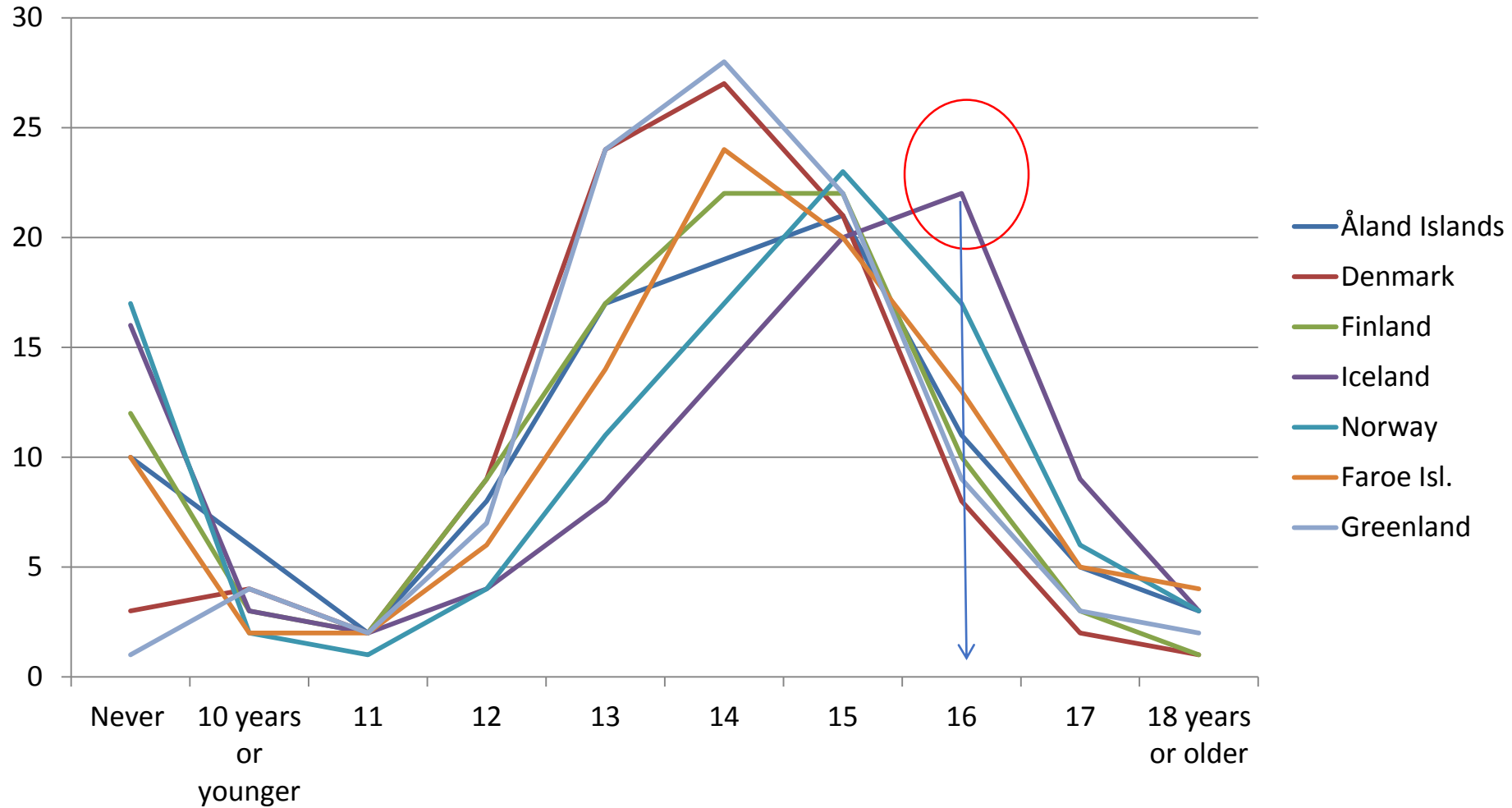
Country	Lifetime use	30-day use	Intoxication last 30 days	Lifetime use		30-day use		Intoxication	
				Boys	Girls	Boys	Girls	Boys	Girls
Albania	60	32	7	71	51	42	23	10	4
Austria	88	68	21	86	90	67	69	22	19
Belgium (Flanders)	80	56	12	77	83	55	58	11	12
Bulgaria	86	59	17	88	85	60	57	20	14
Croatia	92	55	16	94	91	60	49	17	14
Cyprus	88	68	14	90	87	72	63	19	10
Czech Republic	96	68	15	95	97	70	67	18	12
Denmark	92	73	32	93	92	74	73	31	32
Estonia	86	38	8	87	86	36	39	8	7
Faroes	81	38	10	84	78	35	41	7	13
Finland	74	32	13	75	72	32	32	13	13
FYR Macedonia <sup>a</sup>	57	38	8	64	51	45	32	10	6
France	84	53	13	85	83	56	51	14	12
Georgia	85	43	10	86	83	53	33	13	7
Greece	94	66	10	95	93	68	65	11	9
Hungary	93	55	20	94	92	59	52	21	19
Iceland	35	9	3	36	33	9	10	3	3
Ireland	74	35	13	72	75	34	36	14	13
Italy	84	57	13	85	84	60	53	14	13
Liechtenstein	89	59	17	93	86	60	59	19	16
Lithuania	87	34	11	85	89	32	36	10	11
Malta	86	54	14	84	88	52	56	12	17
Moldova	82	56	8	86	78	62	50	11	5
Monaco	89	54	17	88	90	52	57	15	18
Montenegro	78	40	8	83	72	50	31	12	4
Netherlands	73	49	14	73	73	50	49	13	16
Norway	57	22	8	56	58	20	25	8	9
Poland	83	47	11	84	83	49	46	12	11
Portugal	71	42	9	73	70	43	41	9	9
Romania	78	47	12	84	72	56	38	16	7
Slovakia	91	49	13	90	91	48	51	12	13
Slovenia	89	52	14	90	88	55	50	14	14
Sweden	65	26	9	64	66	22	29	7	11
Ukraine	84	39	9	82	86	38	40	9	8
<b>AVERAGE</b>	<b>80</b>	<b>48</b>	<b>13</b>	<b>81</b>	<b>79</b>	<b>49</b>	<b>46</b>	<b>13</b>	<b>12</b>
Latvia	89	44	12	88	90	42	45	14	11
Spain	78	65	21	76	80	63	68	20	21
United States	47	22	10	44	50	21	22	10	10

# Heavy episodic drinking in the last 30 days

ESPAD 2015

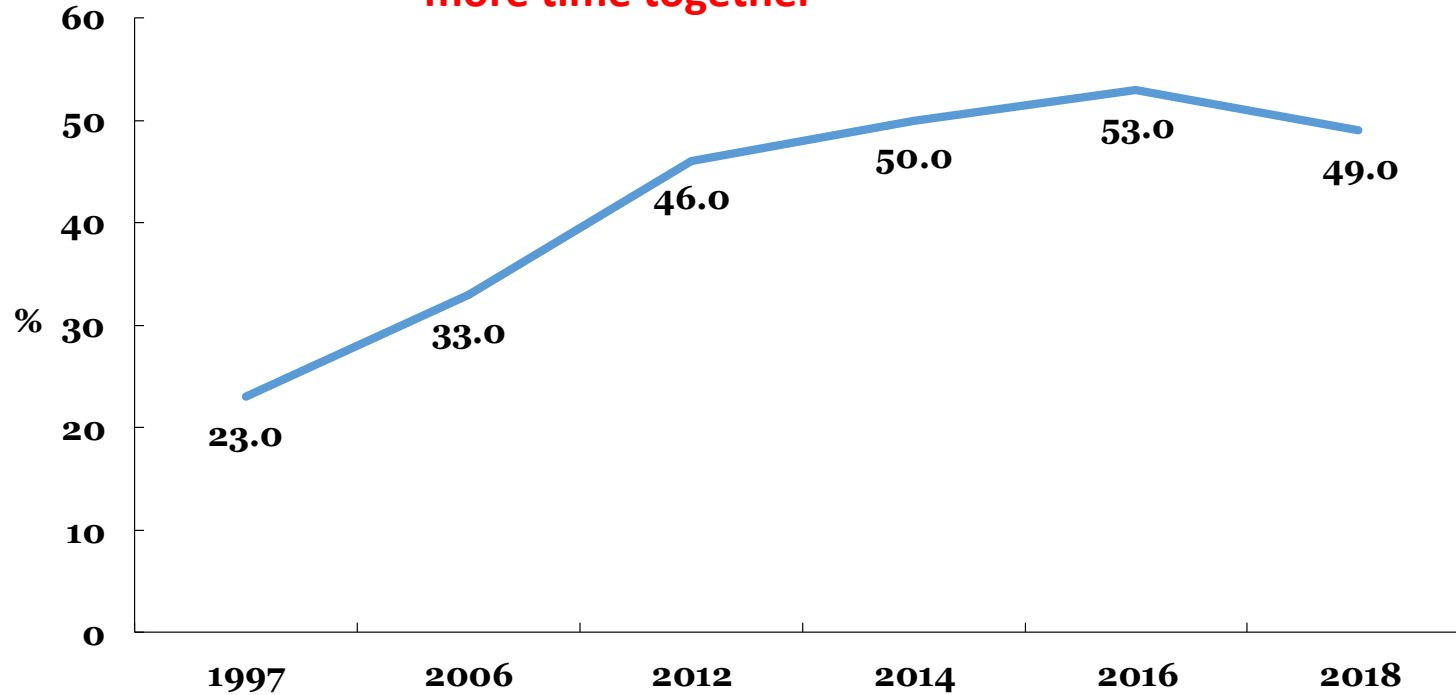


# Alcohol onset – From the 2009 Nordic Youth Study

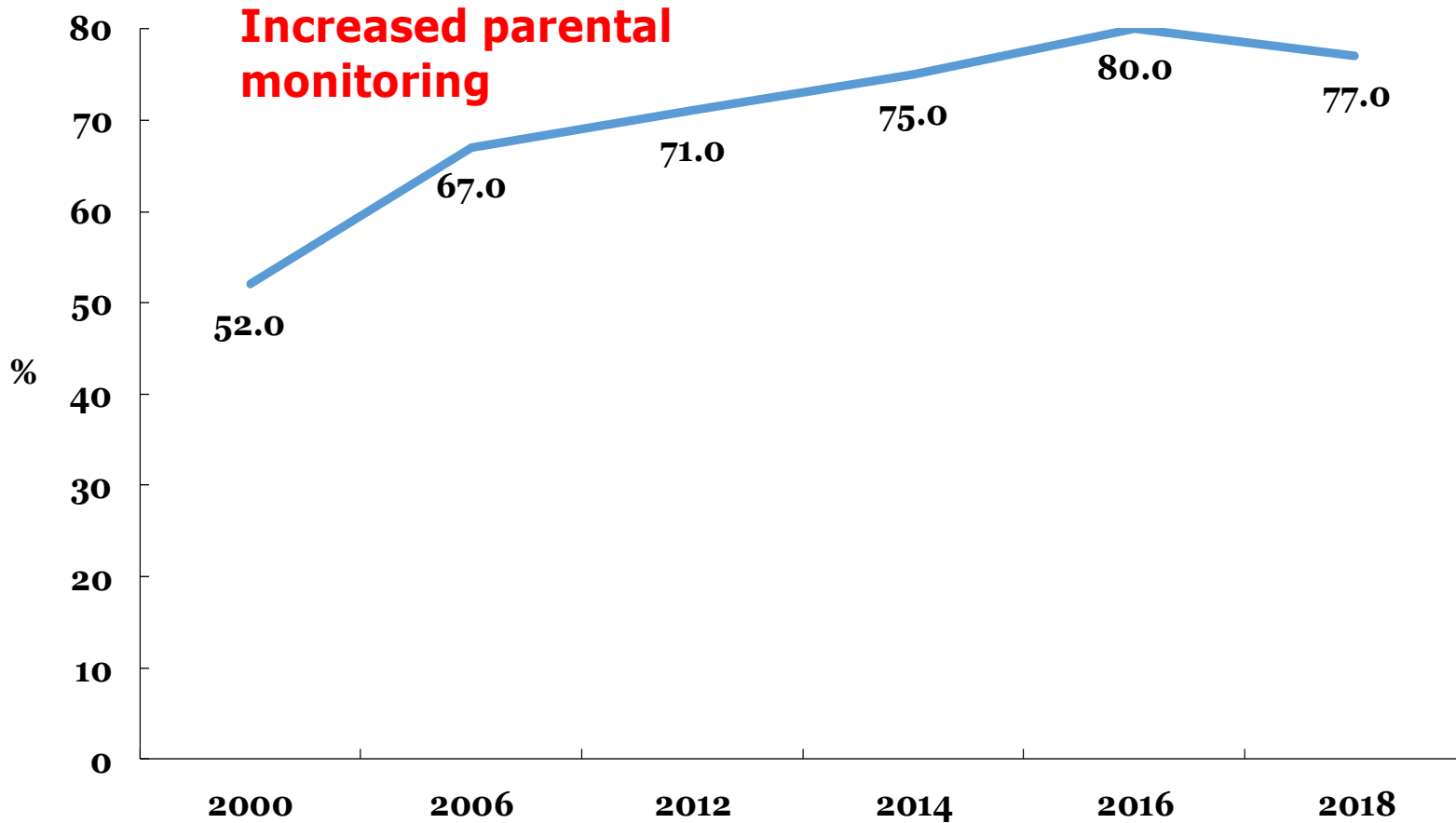


Results, risk and protective factors..

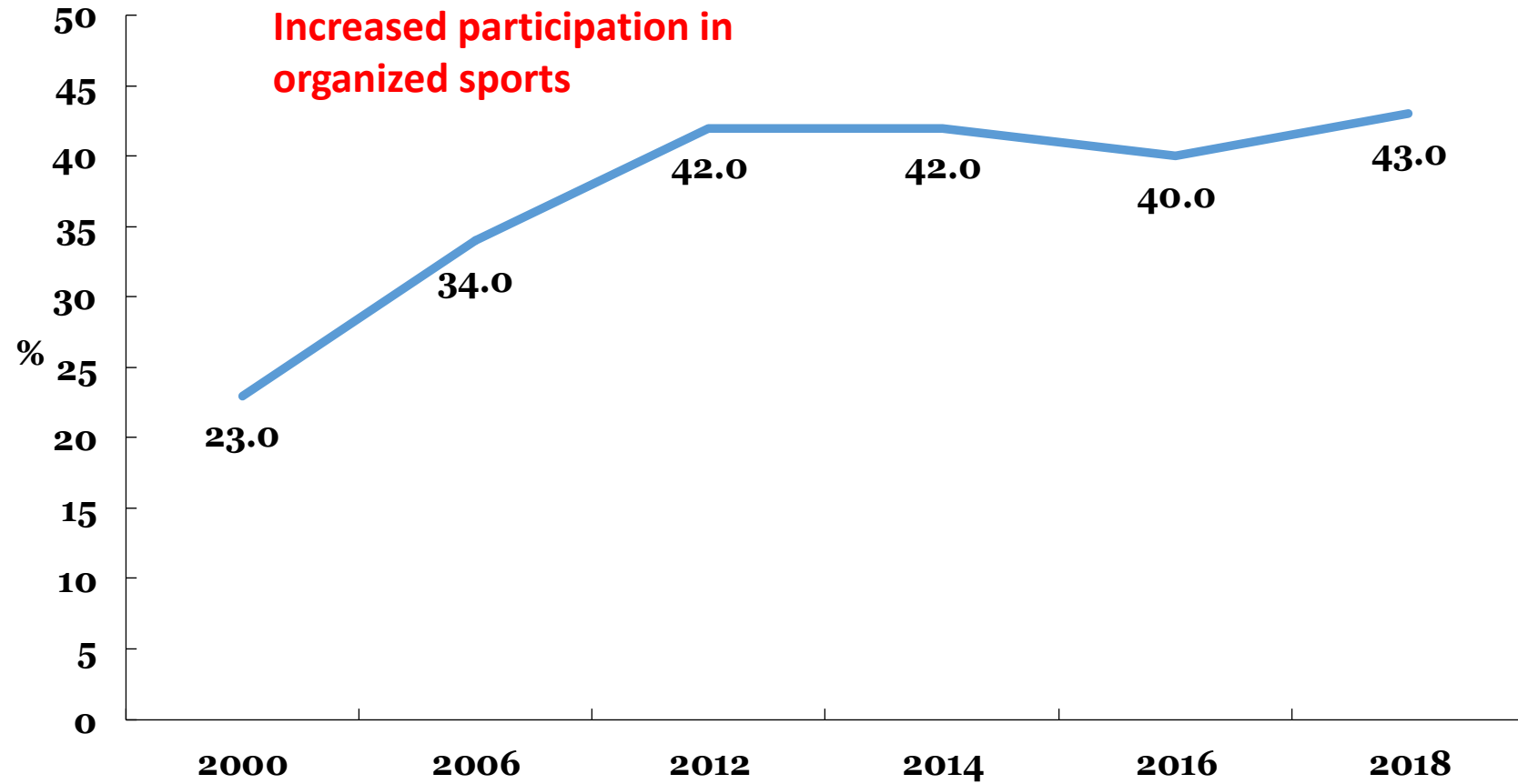
**Parents and children spend more time together**



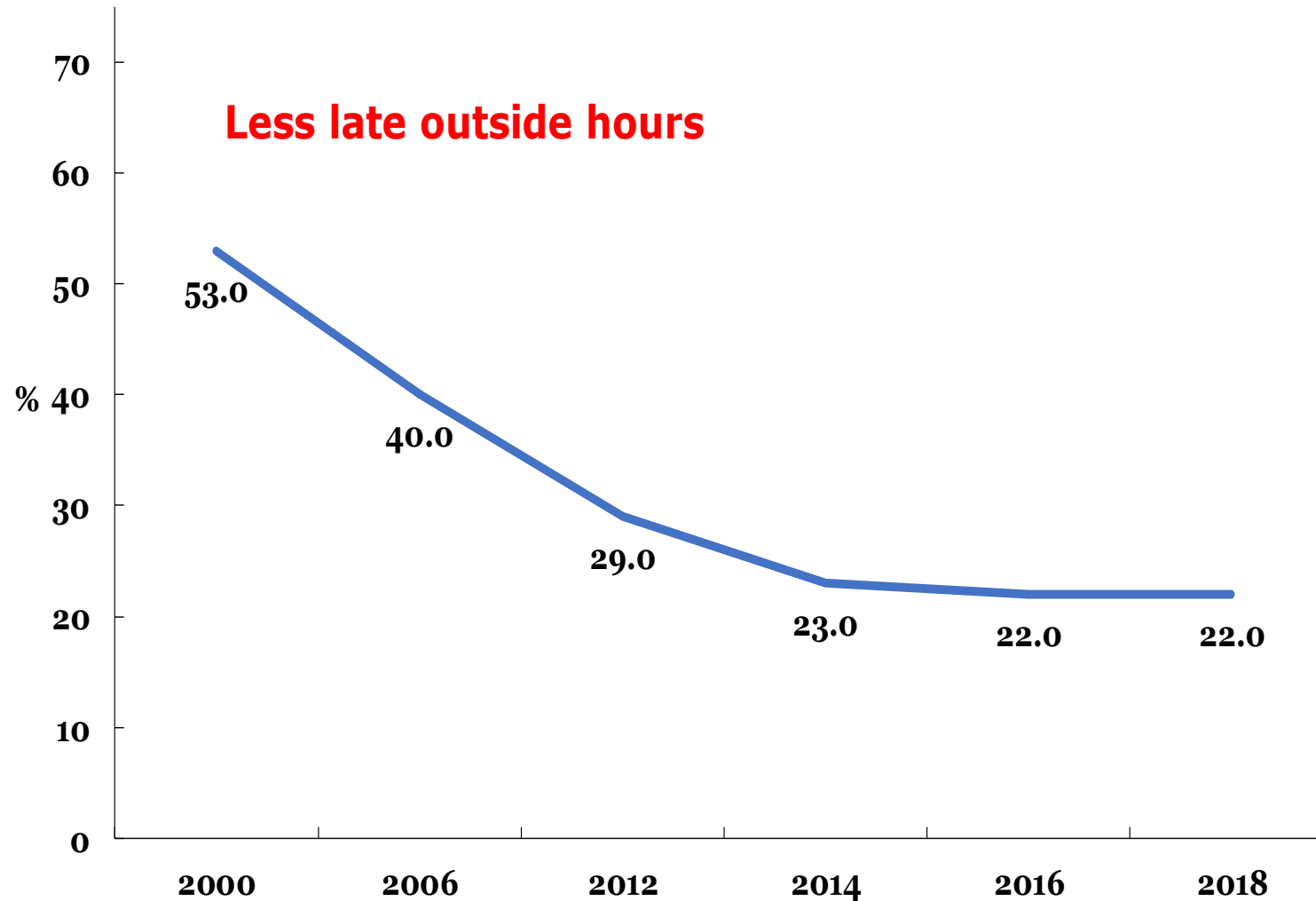
Rates of students in 9<sup>th</sup> and 10<sup>th</sup> grade who spend time (often/almost always) with their parents during weekdays



“My parents know where I am in the evenings” (applies very or rather well to me) 9<sup>th</sup> and 10<sup>th</sup> grade



Rates of students in 9<sup>th</sup> and 10<sup>th</sup> grade that participate in sports with a team or club four times per week or more often

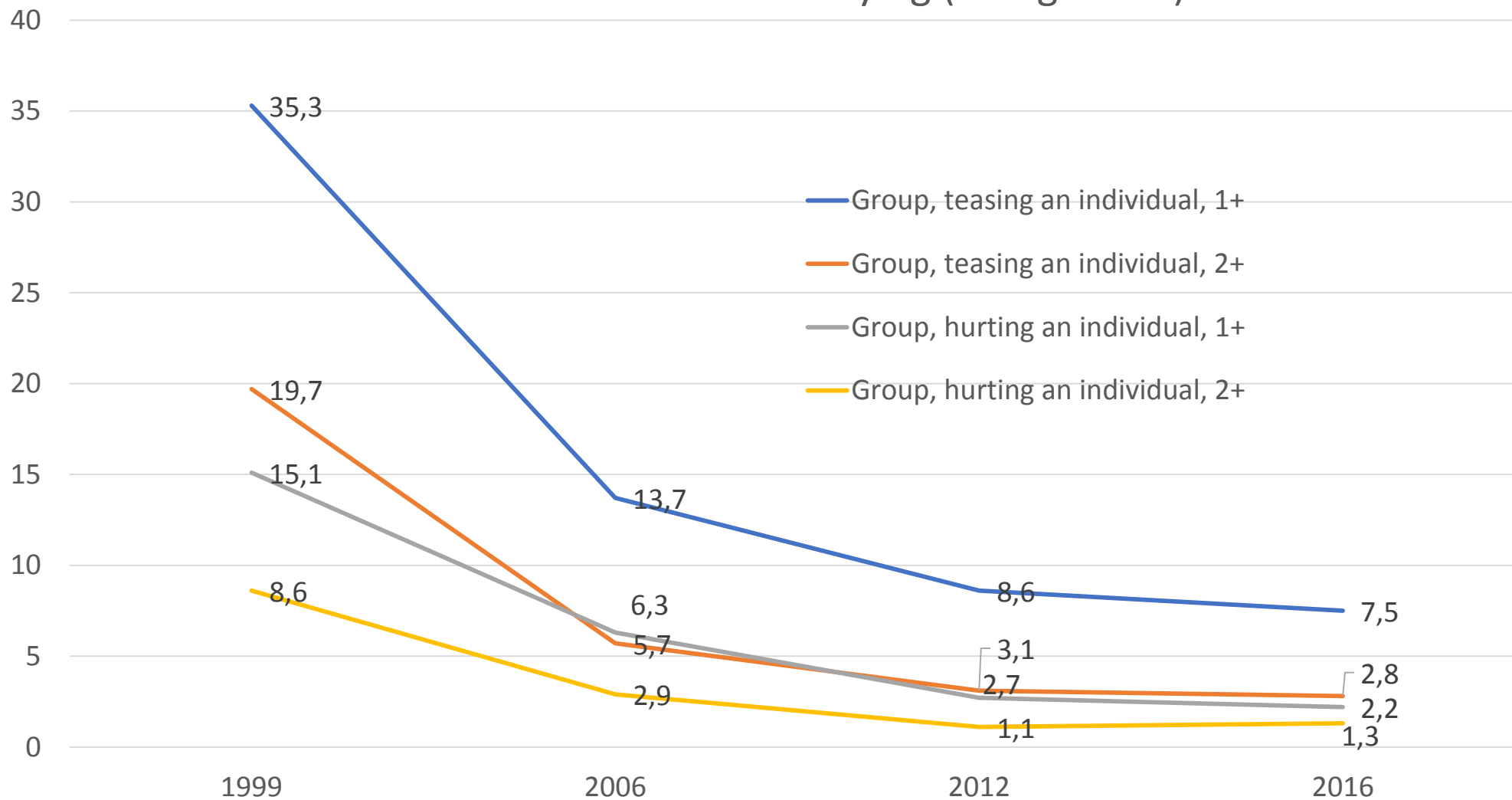


Rates of students in 9<sup>th</sup> and 10<sup>th</sup> grade who have been outside after 10 pm, 3 times+ in the past week

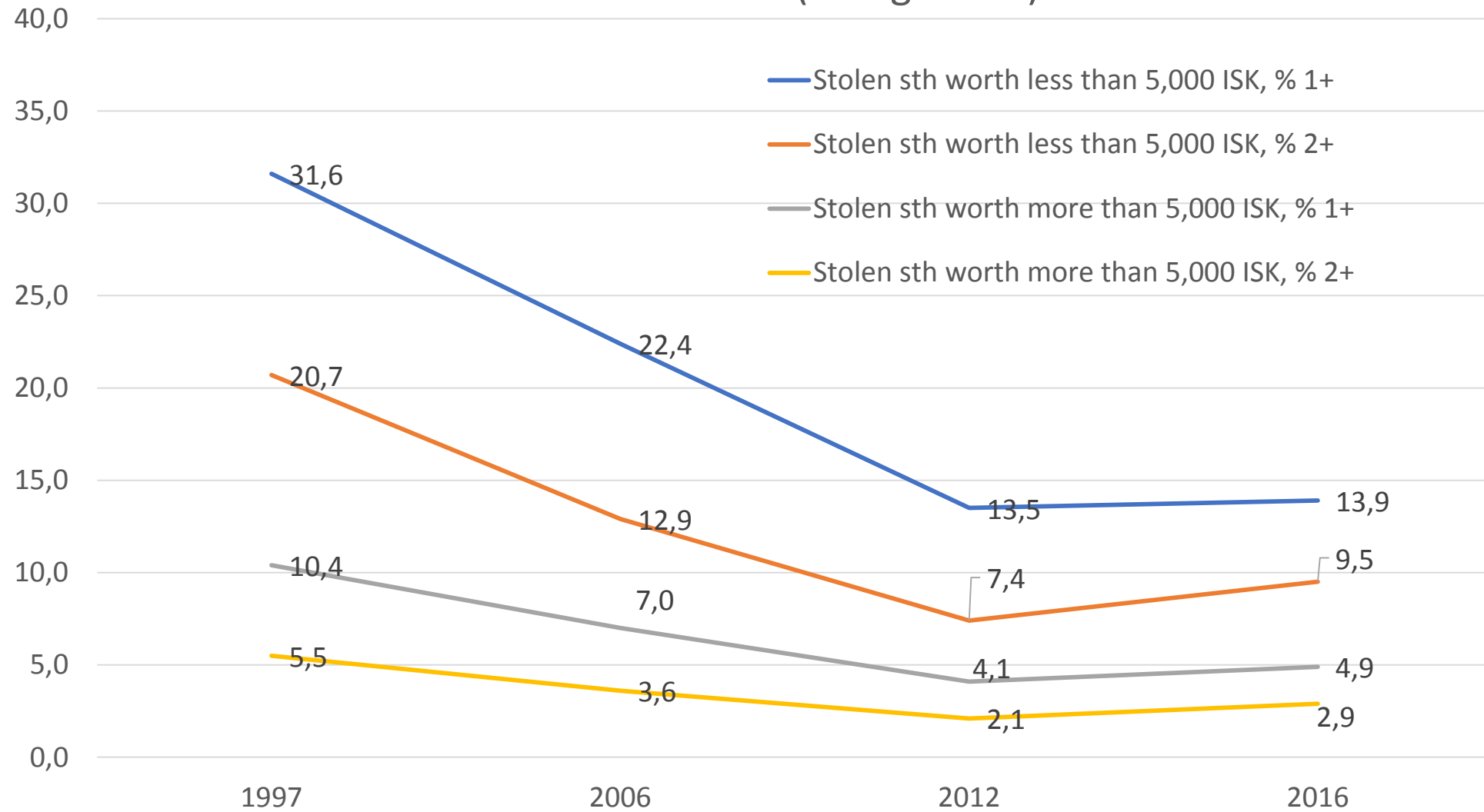


Results, other associated factors..

## Measures on bullying (10<sup>th</sup> graders)

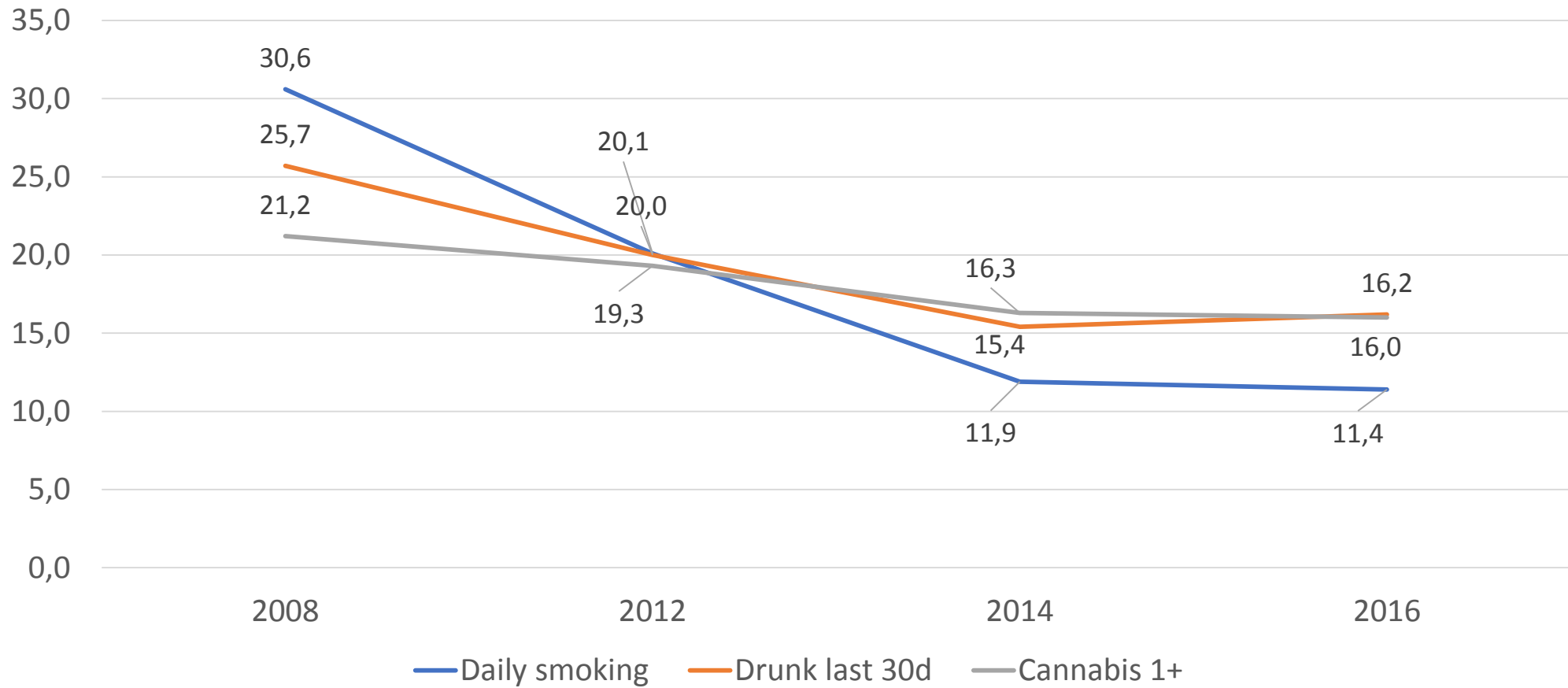


## Measures on theft (10<sup>th</sup> graders)



What about other places?

## Core trend: Riga, Latvia (%)

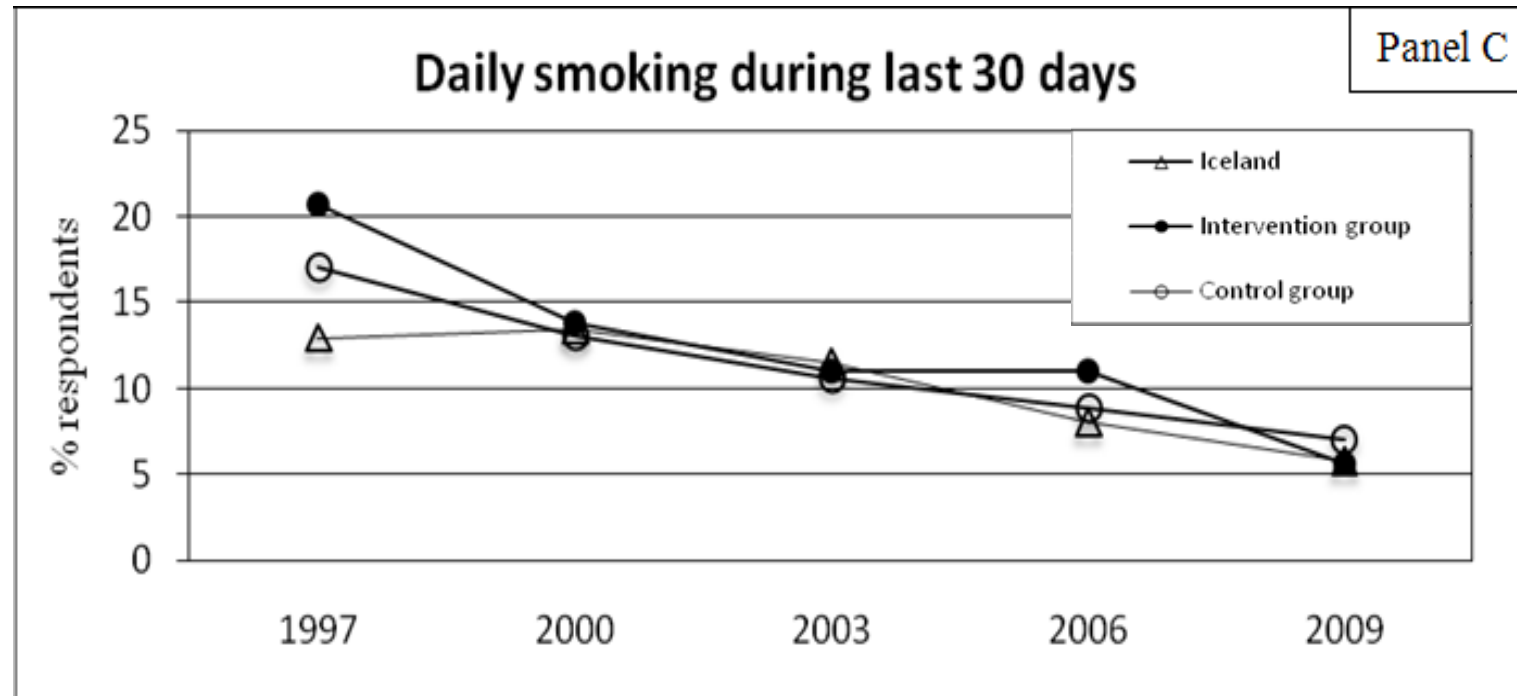


Evaluation

## An attempt to evaluate the progress in Iceland...

- The study used a quasi-experimental, non-randomized control group design, to assess the relative change in substance use and associated factors in 4 intervention- and 7 control communities, depending on their participation and commitment to the prevention activities
- Uses pooled data from 5 cross-sectional data collections among 9<sup>th</sup> and 10<sup>th</sup> graders, from 1997, 2000, 2003, 2006, and 2009
- Number of respondents: 5,024 ( $n_1=3,117$ ,  $n_2=1,907$ )
- **Response rates:**
  - Intervention communities: 85.7%
  - Control communities: 90.1%

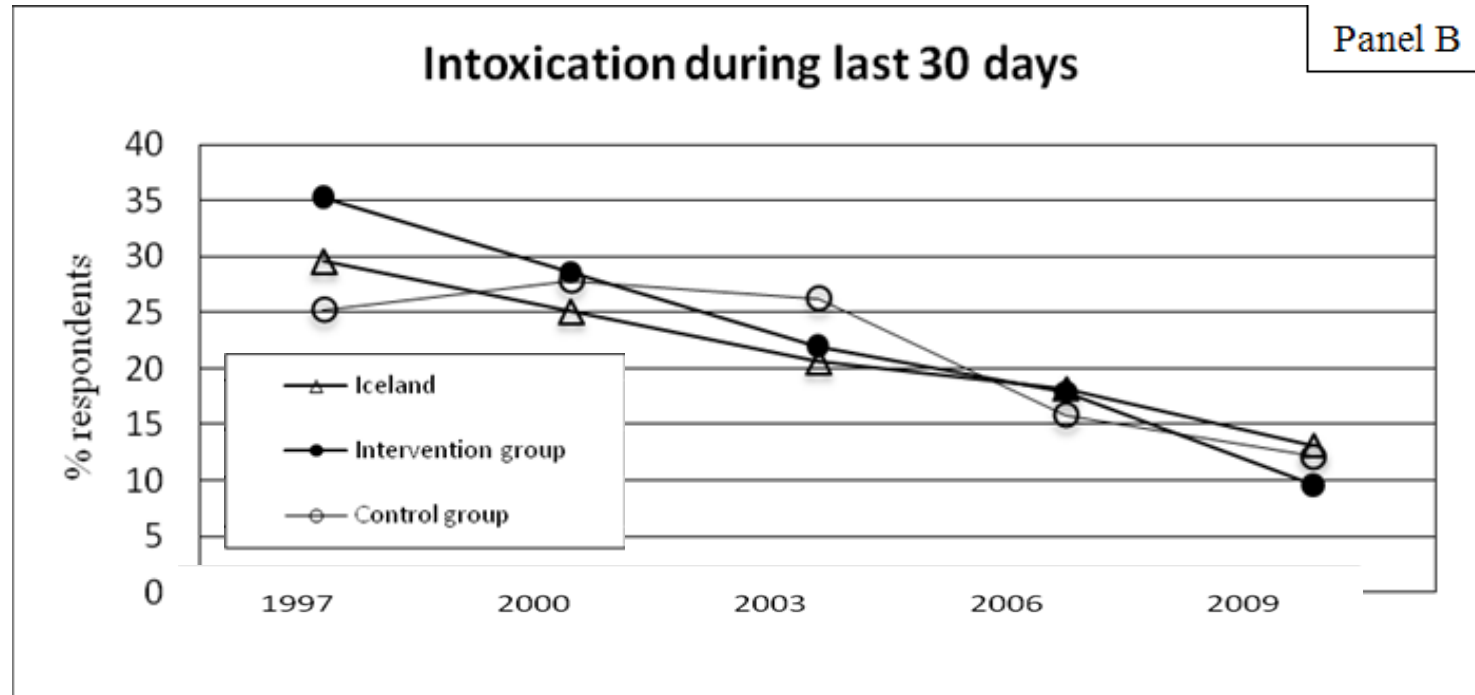
## Results: Daily smoking 1997-2009



Interaction: time\*intervention, OR 0.90 (95% CI: 0.77-1.00,  $p = .099$ )

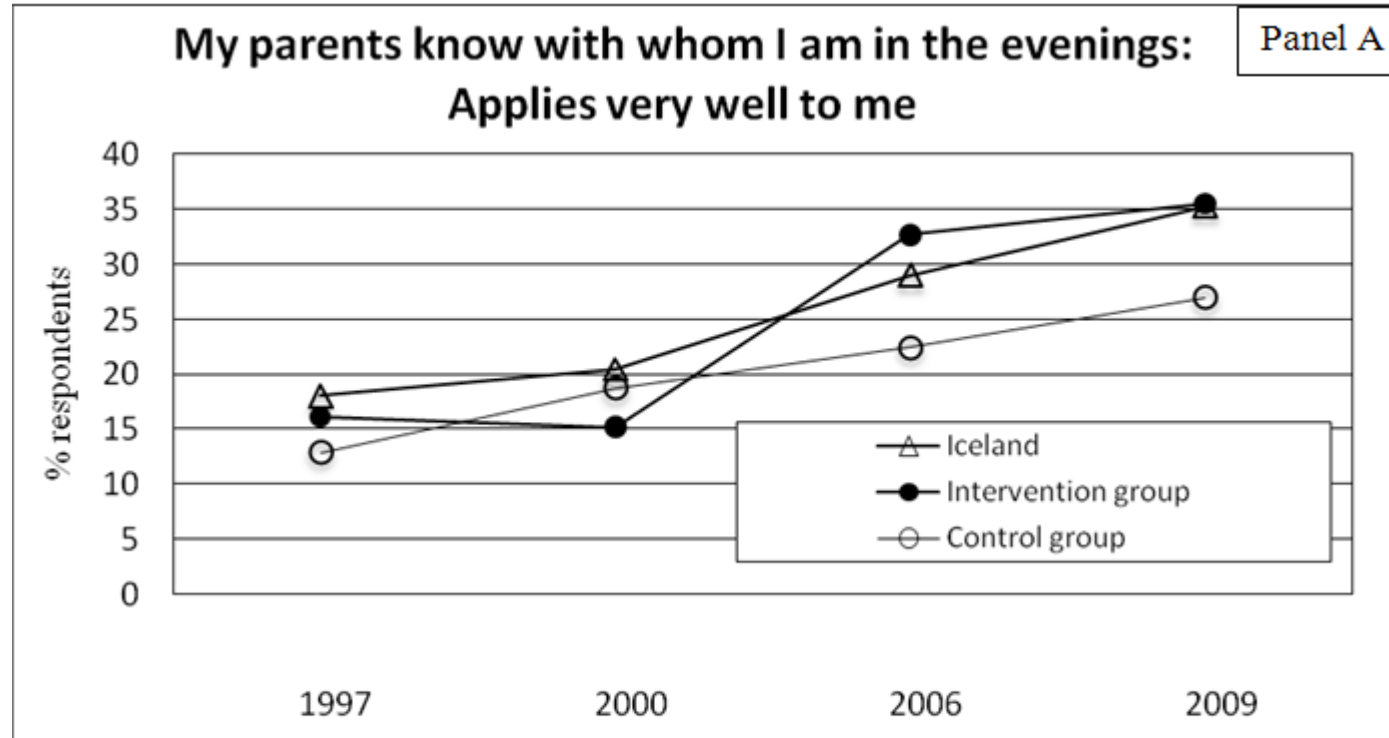


## Results: Intoxication during last 30 days 1997-2009



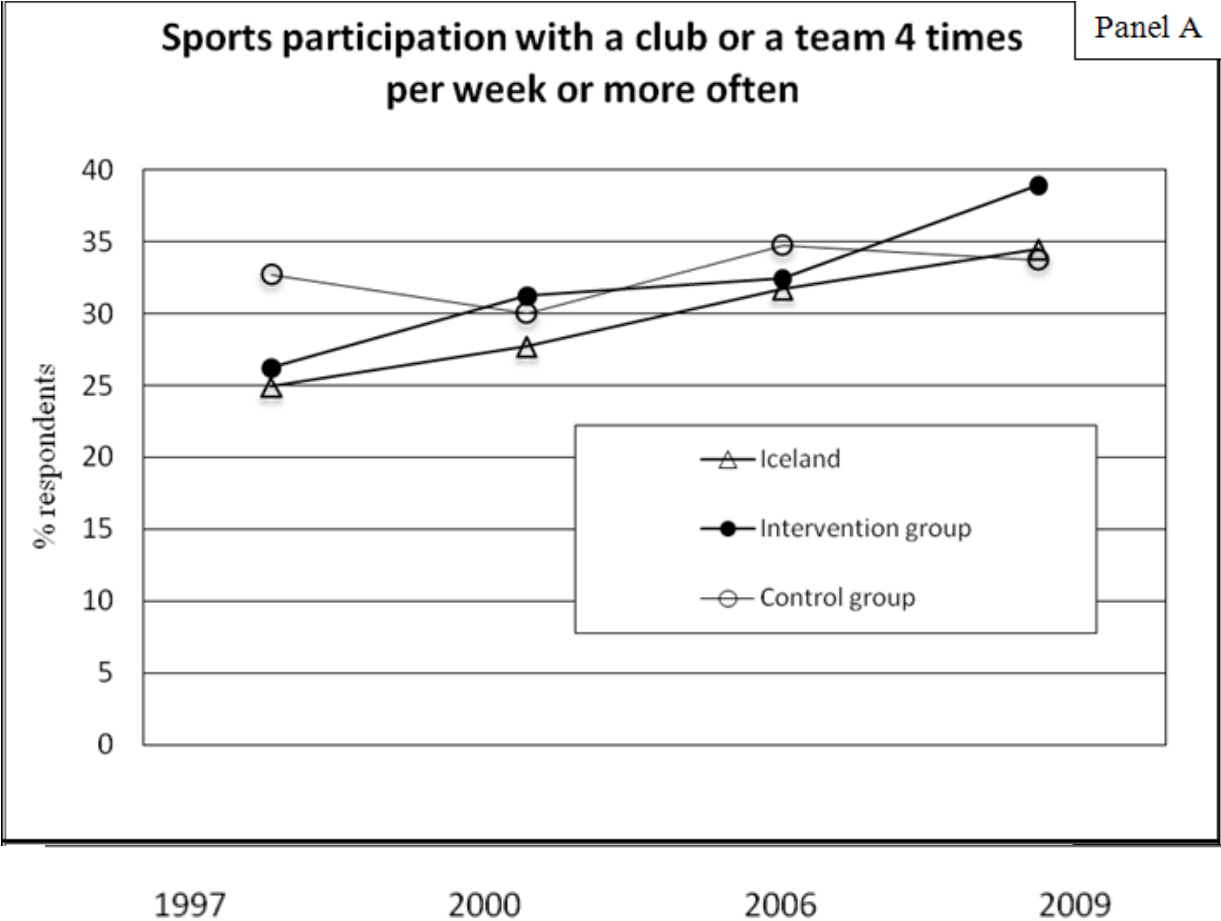
Interaction: time\*intervention, OR 0.86 (95% CI: 0.78-0.96,  $p = .004$ )

## Results: Parental Monitoring 1997-2009



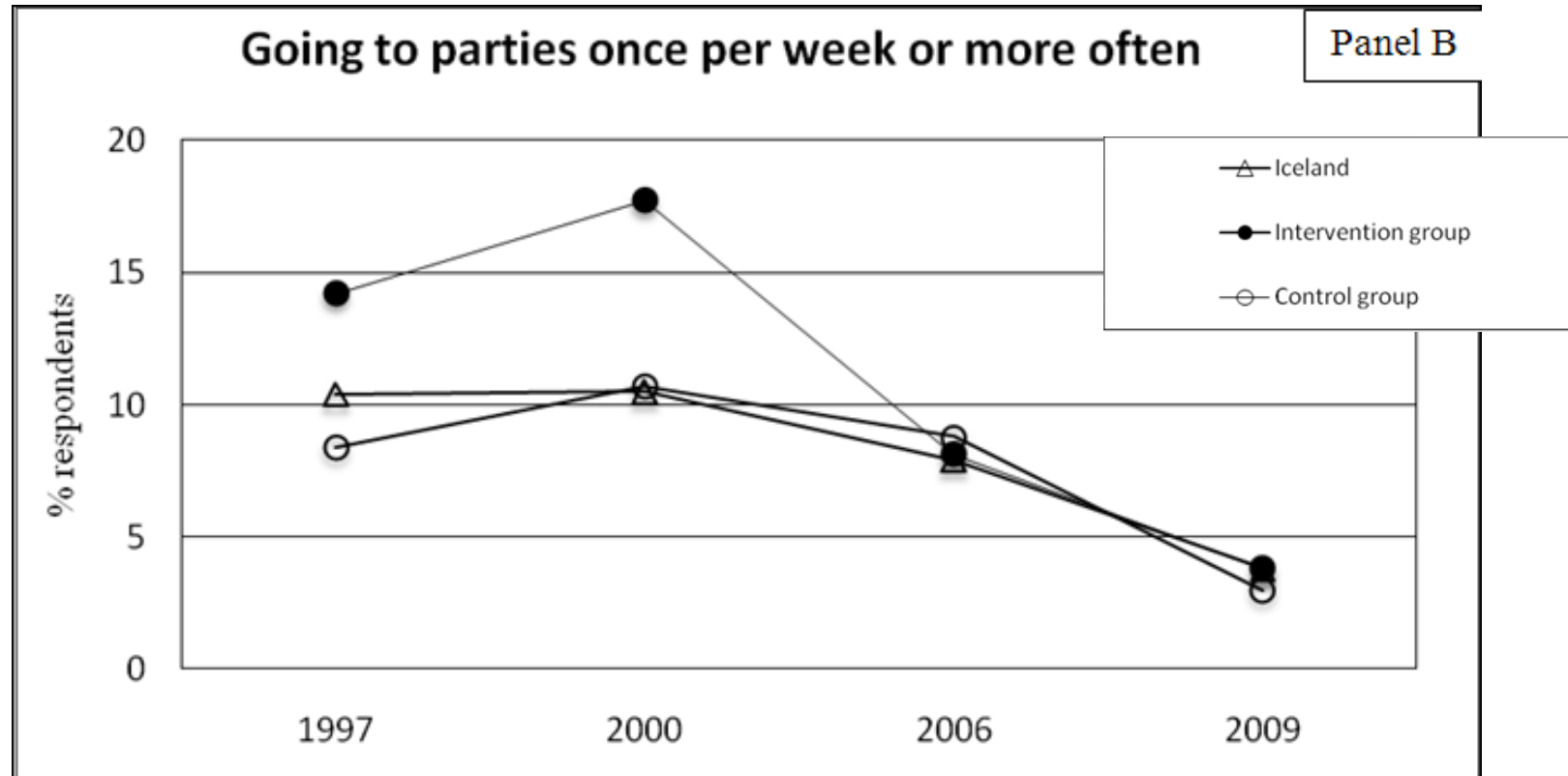
Interaction: time\*intervention, OR 1.11 (95% CI: 1.00-1.22,  $p = .044$ )

# Results: Participation in organized sports 1997-2009



Interaction: time\*inetervention, OR 1.11 (95% CI: 1.02-1.21, p= .015)

## Results: Party lifestyle 1997-2009



Interaction: time\*intervention, OR 0.85 (95% CI: 0.73-0.99,  $p = .034$ )

# In sum...

- Substance use decreased more in intervention communities than the comparison communities
- The prevalence of protective factors increased more in intervention communities than comparison communities
- Methodological limitations:
  - Non-random allocation into groups
  - Spill-over effects highly likely

# Population comparison:

## The European School Project on Alcohol and Other Drugs (ESPAD)

### Comparative findings from the 2015 ESPAD report

Figure 26. Lifetime use of cigarettes by country: 1995-2015 (percentage)



<sup>a</sup> Collected data from 2008 instead of 2007.

The importance of solid research  
methodology and scientific  
publications

# Scientific publications are important..

1. As a selling point to funders
2. To argue for local level support (e.g., elected officials, area directors, administrative leaders)
3. To identify and assess “new” substances and associated risk and protective factors
4. For continuous learning and growth
5. To enhance practical use of the data



Sigfusdottir et al., (2009). Substance use prevention for adolescents: The Icelandic Model. *Health Promotion International*, 24(1), 16-25.

## Substance use prevention for adolescents: the Icelandic Model

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### SUMMARY

Data from the European School Survey Project on Alcohol and other Drugs have shown that adolescent substance use is a growing problem in western and particularly Eastern European countries. This paper describes the development, implementation and results of the Icelandic Model of Adolescent Substance Use Prevention. The Icelandic Model is a theoretically grounded, evidence-based approach to community adolescent substance use prevention that has grown out of collaboration between policy makers, behavioural scientists, field-based practitioners and community residents in Iceland. The intervention focuses on reducing known risk factors for substance use, while strengthening a broad range of parental, school and community protective factors. Annual cross-sectional surveys demonstrate the impact of the intervention on substance use among the population of

14- to 16-year-old Icelandic adolescents. The annual data from two cohorts of over 7000 adolescents (>81% response rate) show that the proportions of those who reported being drunk during the last 30 days, smoking one cigarette or more per day and having tried hashish once all declined steadily from 1997 to 2007. The proportions of adolescents who reported spending time with their parents and that their parents knew with whom they were spending their time increased substantially. Other community protective factors also showed positive changes. Although these data suggest that this adolescent substance use prevention approach successfully strengthened a broad range of parental, school and community protective factors, the evidence of its impact on reducing substance use needs to be considered in light of the correlational data on which these observations are based.

*Key words:* adolescence; intervention; prevention; substance use

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Sigfusdottir et al., (2010). A collaborative community approach to adolescent substance misuse in Iceland. *International Psychiatry*, 7(4), 86-88.

## A collaborative community approach to adolescent substance misuse in Iceland

Inga Dora Sigfusdottir PhD,<sup>1,2</sup> Alfgeir L. Kristjansson PhD,<sup>1,2</sup>  
Margret L. Gudmundsdottir MA<sup>1</sup> and John P. Allegrante PhD<sup>1,2,3</sup>

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Substance use has become a major threat to health and human development in many European countries. In 23 out of 28 countries participating in the European School Survey Project on Alcohol and Other Drugs (ESPAD), there was a constant and substantial increase in substance use among secondary-school students between the years 1995 and 2003 (Hibell *et al*, 2003). Iceland experienced a similar upward trend in substance use (Sigfusdottir *et al*, 2008). Throughout the 1990s, the use of alcohol, tobacco and other drugs increased steadily among 15- and 16-year-olds. In 1998, approximately 17% of 16-year-olds had tried hashish, which was the highest frequency to be measured in Iceland, and over 80% reported that they had used alcohol once or more in their lives (Thorlindsson *et al*, 1998).

In spite of prevention efforts being employed at the time

from which local authorities might have more successfully addressed the potentially modifiable factors underlying substance use. Finally, prevention efforts were not grounded in social science theory, nor had they used empirical research and the available evidence base on substance use prevention (Saxe *et al*, 2006).

### The current approach

Our current work has been guided by key theories from social science, including Durkheim's work on social integration and regulation (Durkheim, 1897). Although Durkheim focused on suicide and social deviance, his theoretical perspective on human behaviour and social problems has a broad and enduring conceptual scope. It covers critical variables related

Sigfusdottir et al., (2011). Substance use prevention through school and community-based health promotion: A transdisciplinary approach from Iceland. *Global Health Promotion*, 18(3), 23-26.

## Commentary

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### Substance use prevention through school and community-based health promotion: a transdisciplinary approach from Iceland

Inga Dora Sigfusdottir<sup>1,2</sup>, Alfgeir L. Kristjansson<sup>1</sup>,  
Margret L. Gudmundsdottir<sup>1</sup> and John P. Allegrante<sup>2,3</sup>

**Abstract:** During the last decade, Iceland has made impressive progress in reducing adolescent substance use. By engaging schools, youth organizations, and other community stakeholders concerned with youth development, Iceland has developed local partnerships that have worked assiduously to reduce risk factors and strengthen school and community-level protective factors for adolescent substance use that peaked in 1998. The nationwide implementation of this transdisciplinary approach to health promotion has led to a 60% decline in both experimentation and use of alcohol, tobacco and cannabis. This article describes the key components of the Icelandic approach to school and community-based health promotion. The potential for adapting elements of this approach to advance school-based healthcare policy and practice to prevent substance use and other health-compromising behaviors in other countries is discussed. (*Global Health Promotion*, 2011; 18(3): 23–26)

**Keywords:** alcohol, children, prevention, risk factors, substance use, tobacco, youth

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Kristjansson et al., (2013). Data collection procedures for school-based surveys among adolescents: the Youth in Europe Study. *Journal of School Health*, 83, 662-667.

GENERAL ARTICLE

# Data Collection Procedures for School-Based Surveys Among Adolescents: The Youth in Europe Study

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## ABSTRACT

**BACKGROUND:** Collection of valid and reliable surveillance data as a basis for school health promotion and education policy and practice for children and adolescence is of great importance. However, numerous methodological and practical problems arise in the planning and collection of such survey data that need to be resolved in order to ensure the validity of the data and to maximize the response rate without being prohibitively costly.

**METHOD:** This article builds on a 15-yearlong experience of such annual data collections in Iceland and describes the preparation, process, and collection of data that provide a common methodologic framework for the school-based survey, Youth in Europe, a population-based survey of 14- to 16-year-old adolescents, being collected across 18 European cities now participating in the European Cities Against Drugs (ECAD) program.

**RESULTS:** We identified 11 critical steps for developing and implementing the surveys in light of the recent literature on the preparation and implementation practices in school-based data collection among adolescents.

**CONCLUSION:** Limiting the disruption of daily operations in schools while at the same time ensuring both quality and clarity of data collection procedures in school-based surveys are of paramount importance for researchers, school personnel, and students.

**Keywords:** adolescence; children; health surveys; schools; surveillance; survey methodology.

**Citation:** Kristjansson AL, Sigfusson J, Sigfusdottir ID, Allegrante JP. Data collection procedures for school-based surveys among adolescents: The Youth in Europe Study. *J Sch Health*. 2013; 83: 662-667.

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Kristjansson et al., (2010). Adolescent substance use, parental monitoring, and leisure time activities: 12-year outcomes of primary prevention in Iceland. *Preventive Medicine*, 51, 168-171.

## Adolescent substance use, parental monitoring, and leisure-time activities: 12-year outcomes of primary prevention in Iceland

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### ARTICLE INFO

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cigarette smoking  
prevention  
substance use

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### ABSTRACT

**Objective.** To examine 12-year changes in alcohol use and cigarette smoking in response to community-based prevention activities among Icelandic adolescents.

**Methods.** This study used a quasi-experimental, non-randomized control group design to compare outcomes in 4 Icelandic communities ( $n=3117$ ) that participated in community-based substance use prevention activities designed to increase levels of parental monitoring and adolescent engagement in healthy leisure-time activities and a matched group of 7 comparison communities ( $n=1,907$ ). Annual, nationwide, population-based cross-sectional surveys of the prevalence of adolescent substance use were conducted among cohorts of Icelandic adolescents, aged 14–15 years ( $N=5,024$ ), in all communities from 1997 to 2009.

**Results.** Parental monitoring and adolescent participation in organized sports increased in communities that adopted the intervention program compared to communities that did not, whereas unmonitored idle hours and attendance at unsupervised parties decreased. Over time, alcohol use ( $OR=0.89$ , 95% CI 0.82, 0.98,  $p=0.012$ ) and being intoxicated during the last 30 days ( $OR=0.86$ , 95% CI 0.78, 0.96,  $p=0.004$ ) decreased more in the intervention than control communities.

**Conclusion.** Community-based prevention designed to strengthen parental monitoring and participation in organized sports may confer some protection against adolescent substance use.

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Kristjansson et al., (2016). Population trends in smoking, alcohol use, and primary prevention variables among adolescents in Iceland, 1997-2014. *Addiction*, 111, 645-652.

## Population trends in smoking, alcohol use and primary prevention variables among adolescents in Iceland, 1997–2014

Alfgeir L. Kristjansson<sup>1,2</sup>, Inga Dora Sigfusdotir<sup>2,3,4</sup>, Thorolfur Thorlindsson<sup>5</sup>, Michael J. Mann<sup>1</sup>, Jon Sigfusson<sup>2</sup> & John P. Algrante<sup>4,6</sup>

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### ABSTRACT

**Aims** To estimate linear time-trends in substance use and primary prevention variables in adolescents in Iceland from 1997 to 2014. **Design** Repeated, cross-sectional population-based school surveys with seven waves of pooled data. **Setting:** Iceland. **Participants** All accessible students enrolled in the 9th and 10th grades in the national Icelandic school system during the spring of 1997, 2000, 2003, 2006, 2009, 2012 and 2014 ( $n = 50\,412$ , boys = 50%). Response rates ranged between 81 and 90% of the population. **Measurements** Measures on substance use included smoking and alcohol use. Primary prevention measures included parental monitoring, parental social involvement, participation in organized sports and reduced participation in a party life-style. **Findings** Substance use decreased consistently during the study period. For example, 30-day drunkenness declined from 29.6 in 1997 to 3.6% in 2014 (linear trend:  $\chi^2_{(1)} = 2846.8$ ,  $P < 0.001$ ), and daily smoking during the last 30 days declined from 17.0 to 1.6% during the same period (linear trend:  $\chi^2_{(1)} = 1614.3$ ,  $P < 0.001$ ). Primary prevention factors strengthened over time. For example, the mean score for parents knowing where their children are in the evenings rose from 2.44 in 1997 to 3.08 in 2014 ( $F_{\text{trend}(1, 42635)} = 2538.3$ ,  $P < 0.001$ ), and mean scores for participation in party life-style declined from 2.23 in 1997 to 1.71 in 2014 ( $F_{\text{trend}(1, 38773)} = 2033.1$ ,  $P < .001$ ). **Conclusions** Substance use among adolescents in Iceland has declined steadily from 1997 to 2014, while primary prevention factors for substance use have increased in strength during the same time-period.

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## Social Profile of Middle School-Aged Adolescents Who Use Electronic Cigarettes: Implications for Primary Prevention

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**Abstract** Electronic cigarette (EC) use continues to increase among adolescents. From a primary prevention point of view, an important gap in our knowledge includes determining whether young smokers that use EC maintain a distinct social profile from kids who use combustible cigarettes (CC). Survey data from middle school students in West Virginia, USA were collected between September and November of 2015 ( $N = 6547$ , response rate 84.7%) as part of a state wide school-based mental health intervention program. Data was analyzed using multinomial logistic regression for categorical data. The results show that compared to never smokers, EC-only users possessed a weaker social support and parental monitoring profile and performed worse in school. Additionally, EC-only users were more likely to feel alienated from school, to associate with delinquent peers, to spend time outside late at night, and to engage in unsupervised gatherings with their friends. In 11 of 13 statistical models no difference was observed between EC-only users compared with CC-only users. However, dual users (that had used both EC and CC in their lifetime) demonstrated a significantly greater risk profile compared with EC-only users. We conclude that middle school-aged kids that use EC share a similar risk profile as kids of the same age that use CC. Similar to traditional

cigarette smoking, EC use in young adolescents is likely to be a social marker of a pathway to further delinquency and should therefore be subject to primary prevention approaches.

**Keywords** Primary prevention · Electronic cigarettes · Middle school · Early adolescents

The prevalence of electronic cigarette (EC) use has grown considerably among young people during the last 5–10 years and has now surpassed that of combustible cigarette (CC) use among both middle and high school-aged children in the USA and many other Western countries (Arrazola et al. 2014; Johnston et al. 2016; Kristjansson et al. 2015; Singh et al. 2016). This means there is a growing number of both middle and high school-aged students that have initiated smoking through the use of EC but have not used CC (Kristjansson et al. 2015; Rennie et al. 2016; Vardavas et al. 2015).

Recent studies have shown EC to be commonly marketed as a safer alternative to conventional combustible cigarettes (Komfield et al. 2015; Pokhrel et al. 2015) and that such marketing efforts have been directed particularly towards young users (Singh et al. 2016; Thrasher et al. 2016). Investigations into adolescent and young users' perception of EC have generally found that advertising and marketing efforts supporting the notion that EC are less physically harmful than CC, are largely upheld among young people (Camenga et al. 2015; Kong et al. 2015). For example, Camenga et al. (2015) found that students in middle school, high school, and college all reported a positive perception of EC compared with CC and overwhelmingly described EC as a healthier alternative to CC. Similarly, through a qualitative analysis Kong et al. (2015) found that young experimenters commonly believe that EC is less physically harmful than CC

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# Population trends in smoking, alcohol use and primary prevention variables among adolescents in Iceland, 1997–2014

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**Aims** To estimate linear time-trends in substance use and primary prevention variables in adolescents in Iceland from 1997 to 2014. **Design** Repeated, cross-sectional population-based school surveys with seven waves of pooled data.

**Setting:** Iceland. **Participants** All accessible students enrolled in the 9th and 10th grades in the national Icelandic school system during the spring of 1997, 2000, 2003, 2006, 2009, 2012 and 2014 ( $n = 50\,412$ , boys = 50%). Response rates ranged between 81 and 90% of the population. **Measurements** Measures on substance use included smoking and alcohol use. Primary prevention measures included parental monitoring, parental social involvement, participation in organized sports and reduced participation in a party life-style. **Findings** Substance use decreased consistently during the study period. For example, 30-day drunkenness declined from 29.6 in 1997 to 3.6% in 2014 (linear trend:  $\chi^2_{(1)} = 2846.8$ ,  $P < 0.001$ ), and daily smoking during the last 30 days declined from 17.0 to 1.6% during the same period (linear trend:  $\chi^2_{(1)} = 1614.3$ ,  $P < 0.001$ ). Primary prevention factors strengthened over time. For example, the mean score for parents knowing where their children are in the evenings rose from 2.44 in 1997 to 3.08 in 2014 ( $F_{\text{trend}(1, 42635)} = 2538.3$ ,  $P < 0.001$ ), and mean scores for participation in party life-style declined from 2.23 in 1997 to 1.71 in 2014 ( $F_{\text{trend}(1, 38773)} = 2033.1$ ,  $P < .001$ ). **Conclusions** Substance use among adolescents in Iceland has declined steadily from 1997 to 2014, while primary prevention factors for substance use have increased in strength during the same time-period.



Kristjansson et al., (forthcoming). The Icelandic Model of Substance Use Prevention. Practical guide to implementation

- Step by step guide to implementing the Icelandic Model of Substance use prevention - with demonstrative examples
- In final stages, will be shared with all interested

# To sum up: What is Iceland doing differently?

- Not much!
- Organizing/arranging traditional aspects of prevention work somewhat differently than is commonly done
  - Primary prevention => not so much about drugs, more about community building
  - Focus on environmental change, not individual responsibility
  - Not a top-down program, but a bottom-up collaborative
  - Collaboration between research-policy-practice is central
  - Consistent and repetitive. No defined time limit
  - Population surveys, not samples
  - Multi-level data reporting aligned with practical utility

# Publications

- Kristjansson AL., Mann, MJ., Smith, ML., Sigfusdottir (in press). Social Profile of Middle School Students Who Use Electronic Cigarettes: Implications for Primary Prevention. *Prevention Science*, E-pub ahead of print.
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# Thank you



**Tarragona**

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**Questions and concerns:**

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