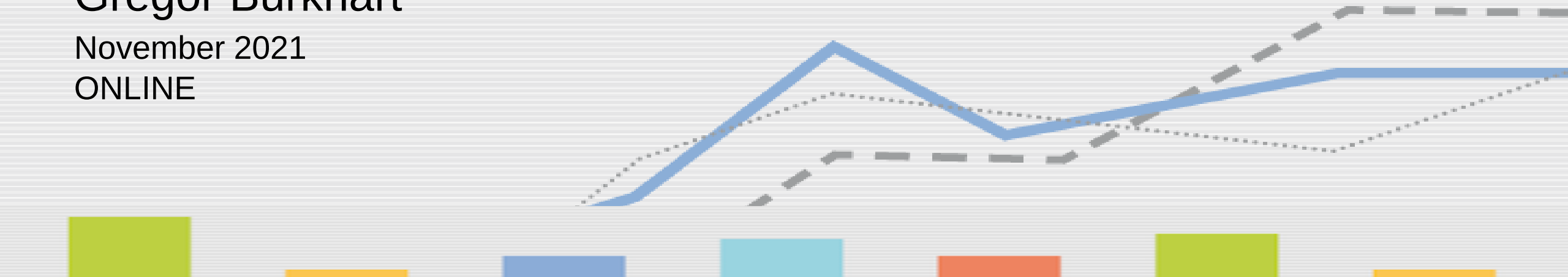
European Monitoring Centre
for Drugs and Drug Addiction

Myths and fallacies in prevention. What to do?

Gregor Burkhart

November 2021
ONLINE



1

The shortcomings continue

There is much to improve



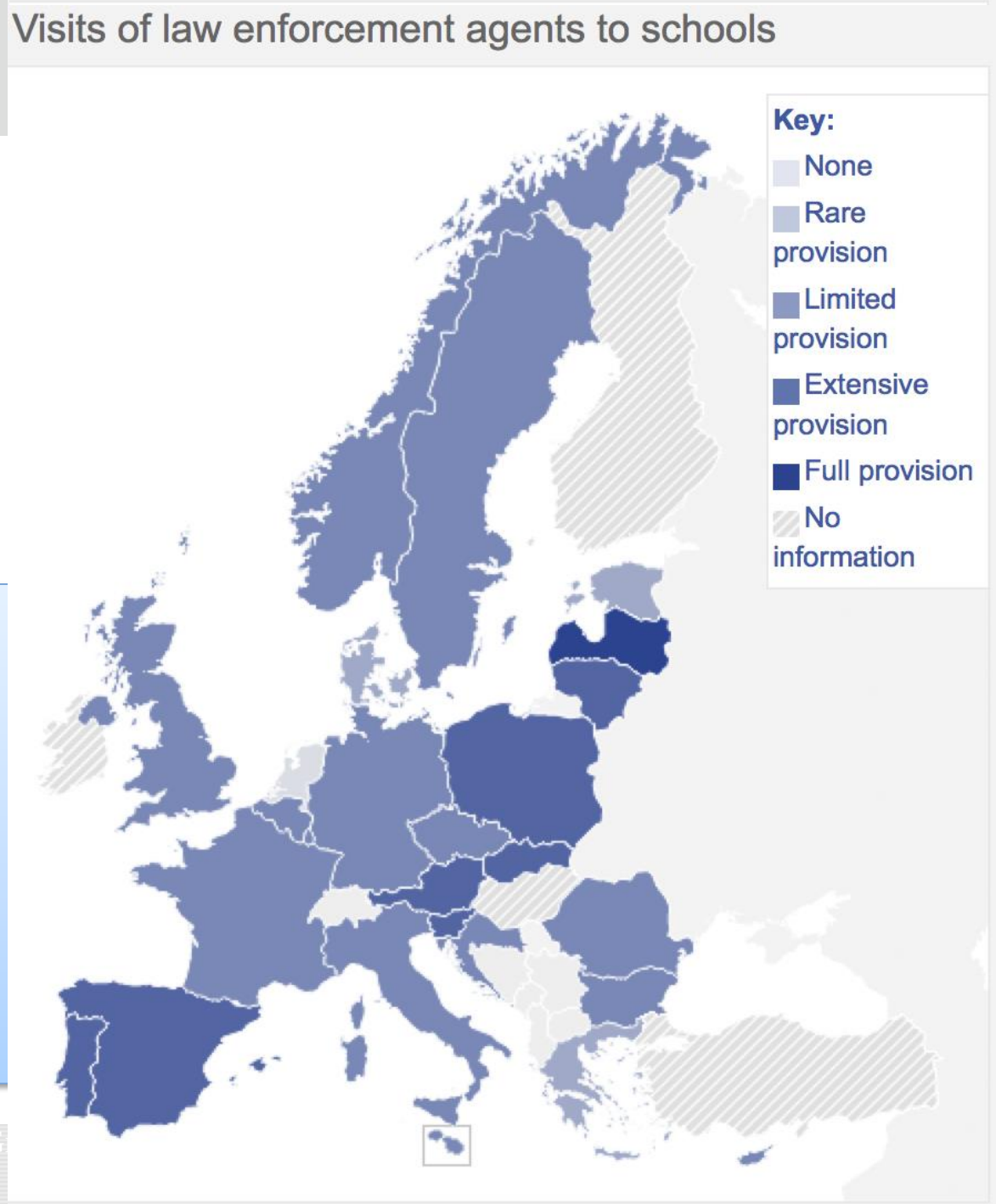
The two prevention fallacies in one sentence

”Prevention is: giving to 13 year olds accurate information about risk behaviour”

Information-based approaches in schools, 2013

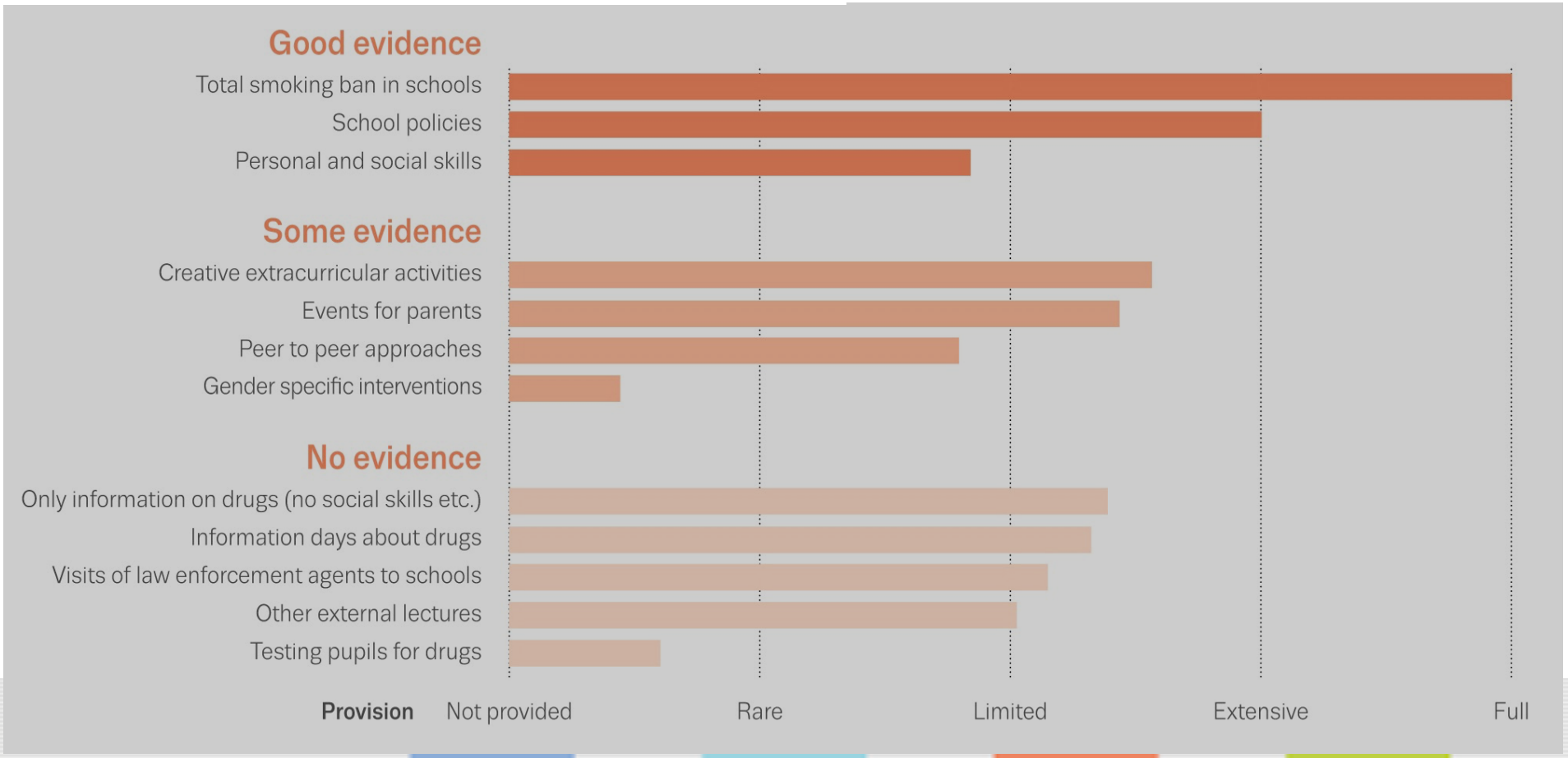
Substance users are far better informed than non-users

Switzerland (Dermota 2013)



Drug prevention in schools

School-based interventions to prevent substance use: provision and evidence of effectiveness



Police in class room? Be careful!

Give lectures about drugs – no evidence

Show the drugs – no evidence

Talk about rules and the law - maybe?

Implement prevention programmes (manualised interventions) – no evidence for DARE

Some evidence for Keepin' it Real, in the US

DARE – again: zero effect, … at best

Research paper

Effectiveness of a school-based substance use prevention program taught by police officers in Brazil: Two cluster randomized controlled trials of the PROERD

Zila M. Sanchez[a,*], Juliana Y. Valente[b], Julia D.P. Gusmões[a], Valdemir Ferreira-Junior[b], Sheila C Caetano[b], Hugo Cogo-Moreira[c], Solange Andreoni[a]

[a] *Departamento de Medicina Preventiva, Universidade Federal de São Paulo, Brazil*
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ARTICLE INFO

Keywords:
Prevention
Adolescents
School
Drugs
Alcohol
Randomized controlled trial

ABSTRACT

Background: The Drug and Violence Resistance Educational Program (PROERD) is widely disseminated and implemented as a public policy in Brazil. PROERD's current curricula are the translation of the North American program DARE-Keepin'it REAL, based on the theories of socio-emotional learning and resistance training. The present study aims to evaluate the effectiveness of PROERD in the prevention of drug use.

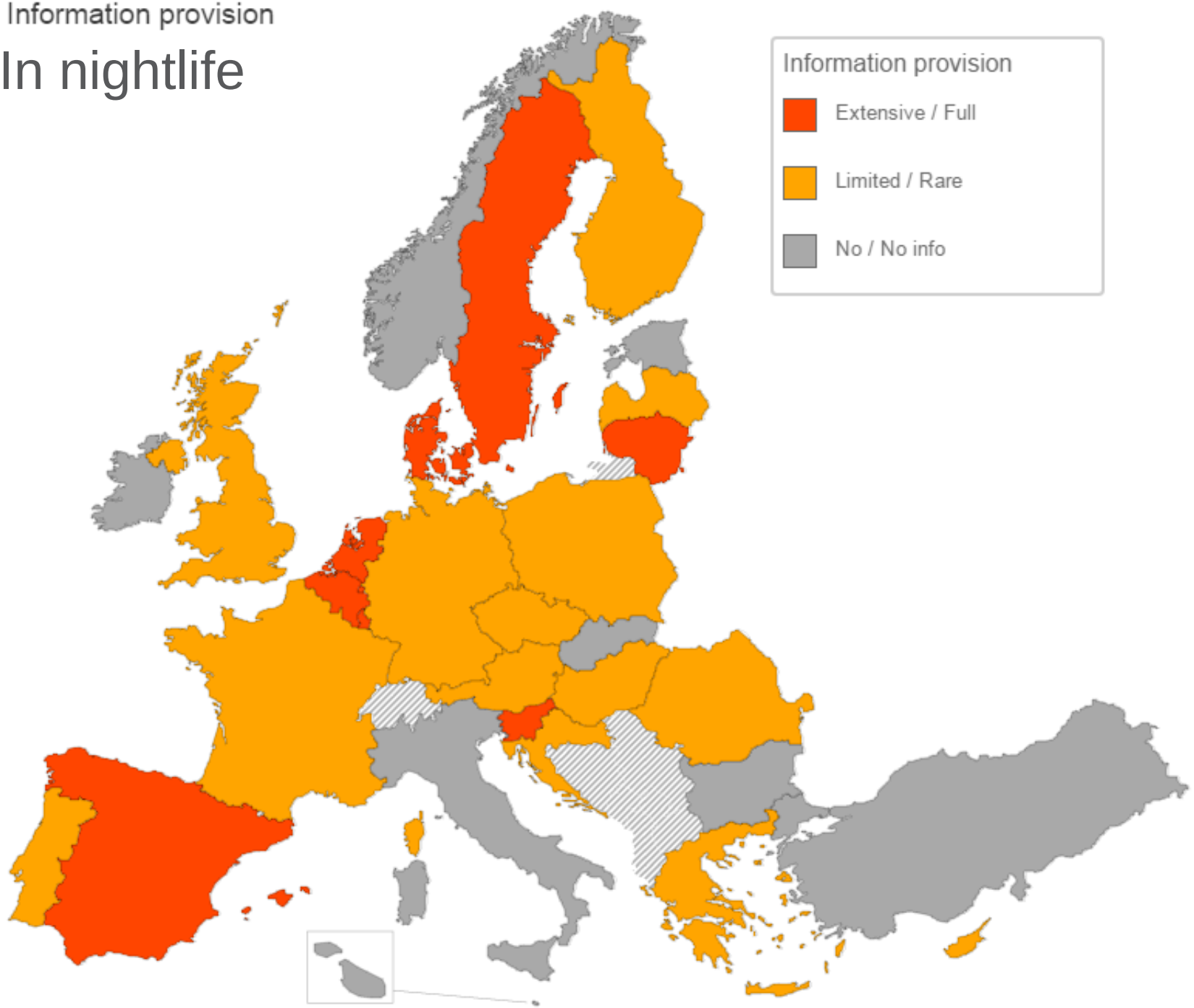
Method: Two PROERD curricula were analyzed through two cluster randomized controlled trials conducted with 4030 students (1727 5th graders and 2303 7th graders) in 30 public schools in São Paulo. The intervention group received ten PROERD classes delivered by trained police officers, and the control group received no intervention. Data collection was performed using self-administered questionnaires on smartphones at two points in time (baseline pre-intervention and nine months follow-up). The outcomes evaluated were initiation and recent drug use. Two different paradigms were used in a multilevel analysis: an analysis of complete cases (CC) and an intention to treat missing data through full information maximum likelihood and selection model.

Results: We found no evidence of the effectiveness of PROERD as an intervention for the prevention of drug use. For the conditional transition analysis, we found that 7th graders in the PROERD group who were already binge drinking at baseline had a significantly higher chance of maintaining this consumption pattern when compared to the control group.

Conclusion: The lack of preventive effects found here suggests that a process evaluation may address concrete implementation and cultural adaptation issues.

Information provision

In nightlife





This is 2018 !

- the main station is Praha-Dejvice, from where the train regularly goes on tours into the regions – the destinations change depending on the current demand of schools and towns

ANTI-DROGEN-ZUG - REVOLUTION TRAIN

Ein Zug, der Schutz vor Drogenmissbrauch bieten soll? Ein Erlebnisprogramm statt eines

"finally something is being done"

nachhaltig angelegte Suchtprävention vor Ort eingebettet ist und von erfahrenen Fachkräften der Suchtprävention vor- und nachbearbeitet wird.

Was ist das?

Der „Revolution Train" ist in seiner Form ein einzigartiges Projekt der Drogenprävention, zumal es auf Erlebnis mit allen Sinnen und auf Interaktion setzt. Den Projektkern bildet der Anti-Drogen-Zug – ein multimedialer mobiler Zug, dessen interaktive Form eine

Hinweis

In der Rubrik "Projekte des Monats" werden Aktivitäten vorgestellt, die aufgrund ihres inhaltlichen Schwerpunktes oder ihrer Vorgehens bundesweite Aufmerksamkeit verdienen.
Wichtig: Die Präsentationen werden von den Projektverantwortlichen selbst verfasst und geben nicht zwingend die Meinung der Drogenbeauftragten wieder.

In der Hauptrolle: Erlebnis

The Revolution Train: prevention's BREXIT

- You Tube Link
- Aggressive emotional media messaging
- Exaggeration of problems: "more and more drug problems"
- present themselves as a victim: "nobody acts", the experts ("elites") block us
- No new solutions, outdated contents: pure shock-tactics (in a new format, though)
- Infiltrate institutions and media with fake news: "evaluated", "novel approach", "finally somebody does something"



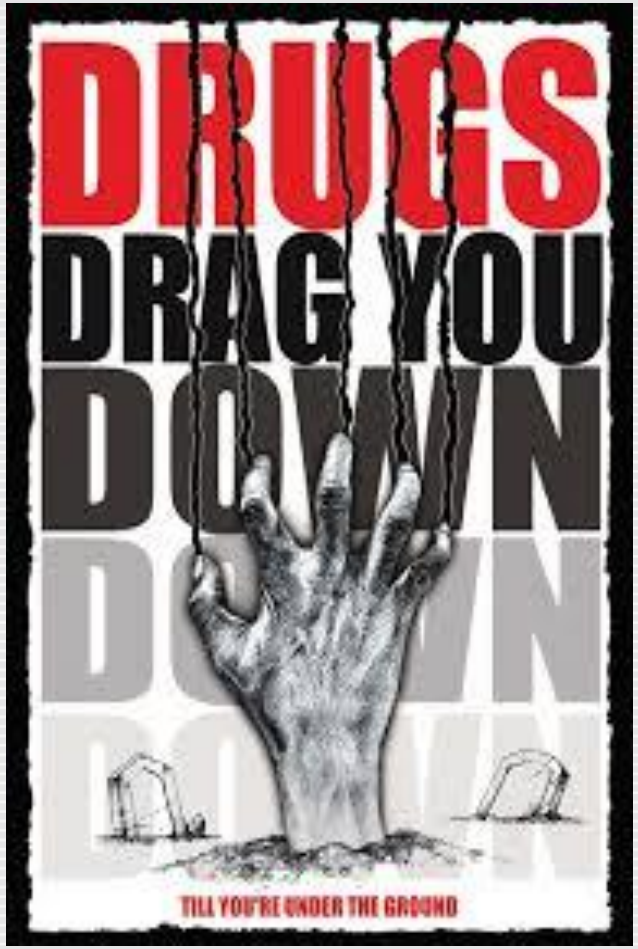
Lay epidemiology: antivaxxers and bad prevention

Lay epidemiology is how inferences are drawn from patterns of disease in small groups like friends and family, larger groups from social media or other sources, and even entire populations from public information or news stories.

2

Why do informational approaches fail?

… and can be harmful for some



Minority versus Majority





Four variables change behaviour

(1) severity: are there severe negative consequences of my current behaviour?
(2) susceptibility: is it likely I will suffer these consequences?

(3) response efficacy: is there something I can do to prevent these negative consequences?
(4) self-efficacy: am I confident that I can carry out that behaviour?

If 3 & 4 are low: people ignore, deny, reject message.
Threatening messages reduce 3 & 4

Self-efficacy determines everything!



interesting
…



High risk behaviour



I'll never do it!
Great campaign

Protective behaviour

Two examples



Why so popular: evidence of fear messages?

https://fearappeals.com/

For positive behavioural change:

None

Bad research: self reports, intentions, no control groups, misinterpretations of findings
(Tannenbaum 2015, Hall 2016)

Showing non-evidence does not change intuitive beliefs

Punctual selective observations: ”my own experience shows” (homeopathy, anti-vaxxers) wins over scientific scrutiny

It‘s all about personal responsability, right?



… or about education …

Figure 1: How Food Marketing Influences Overeating



Unconscious environmental cues

Descriptive Norms –*"everybody" does XY*

Injunctive Norms – *XY is OK and acceptable*

Implicit Cognition – automatic processing of cues





Unconscious environmental cues

Descriptive Norms –“everybody” does XY

Injunctive Norms – *XY is OK and acceptable*

Implicit Cognition – automatic processing of cues





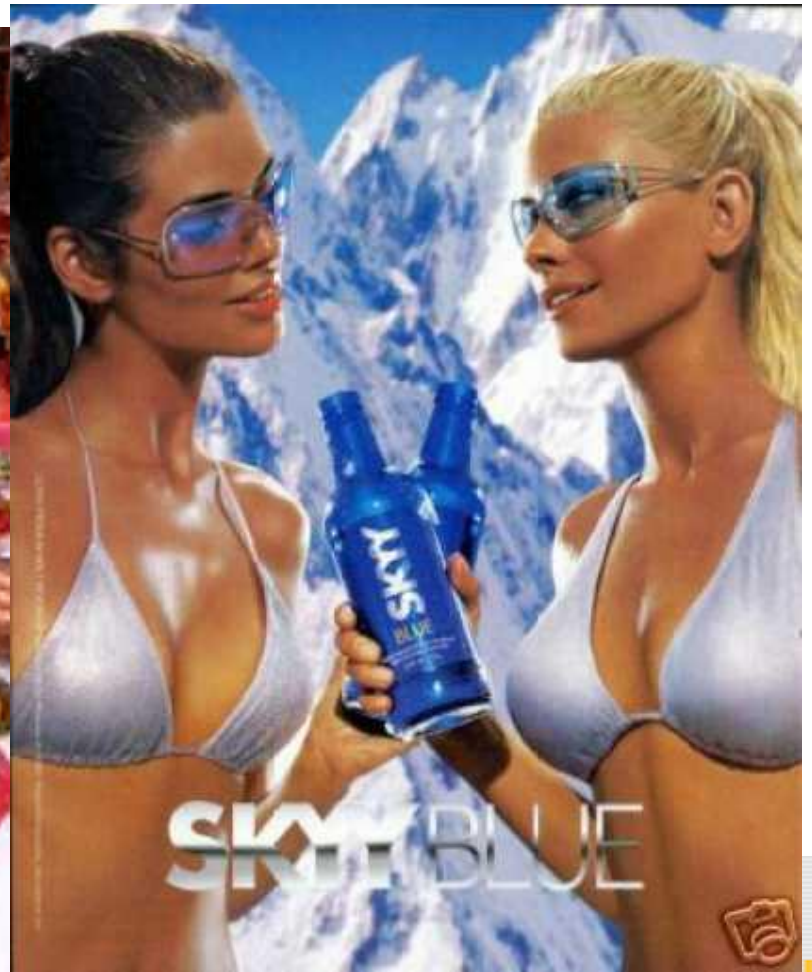
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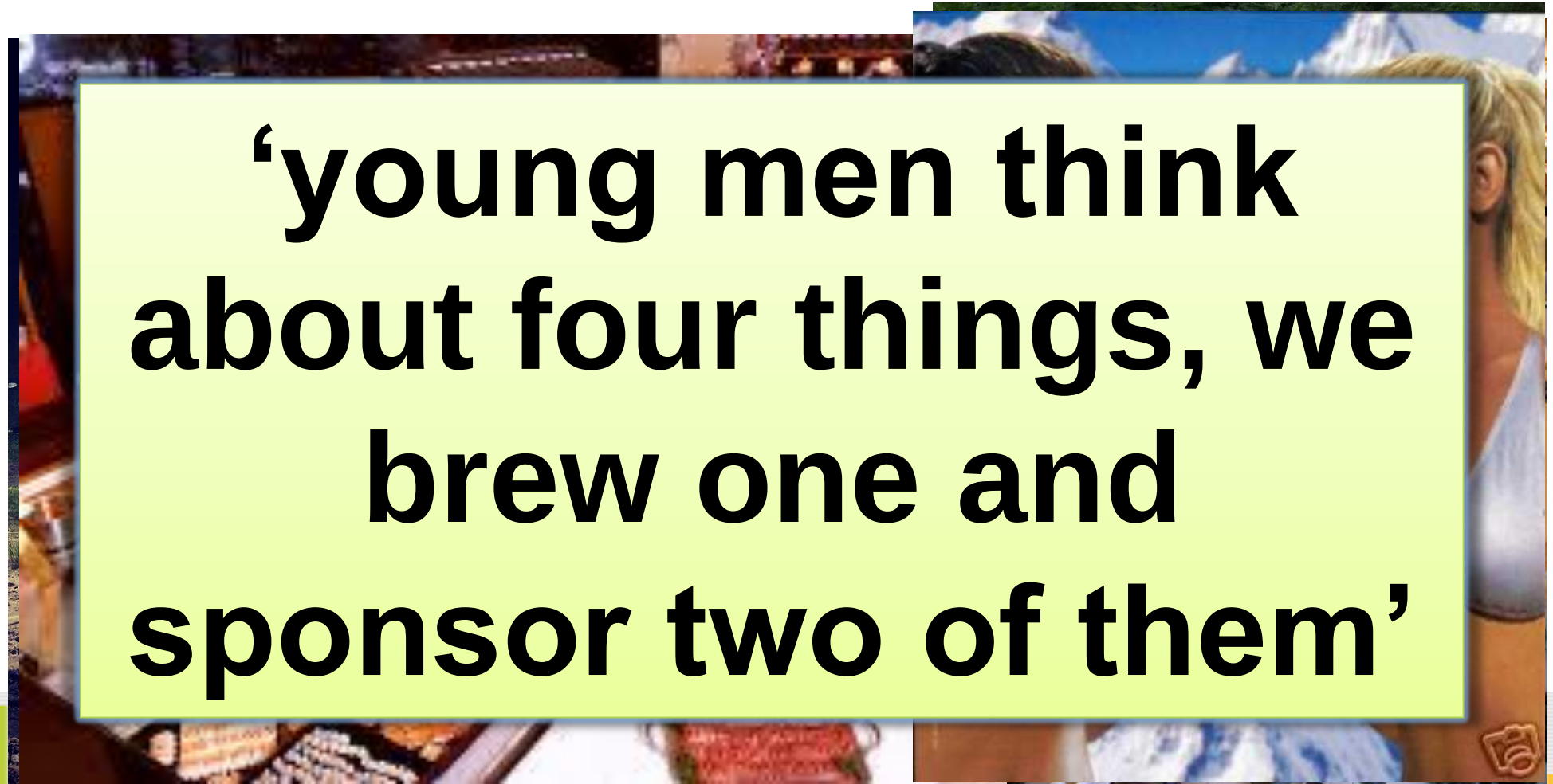
Implicit Cognition – automatic processing of cues



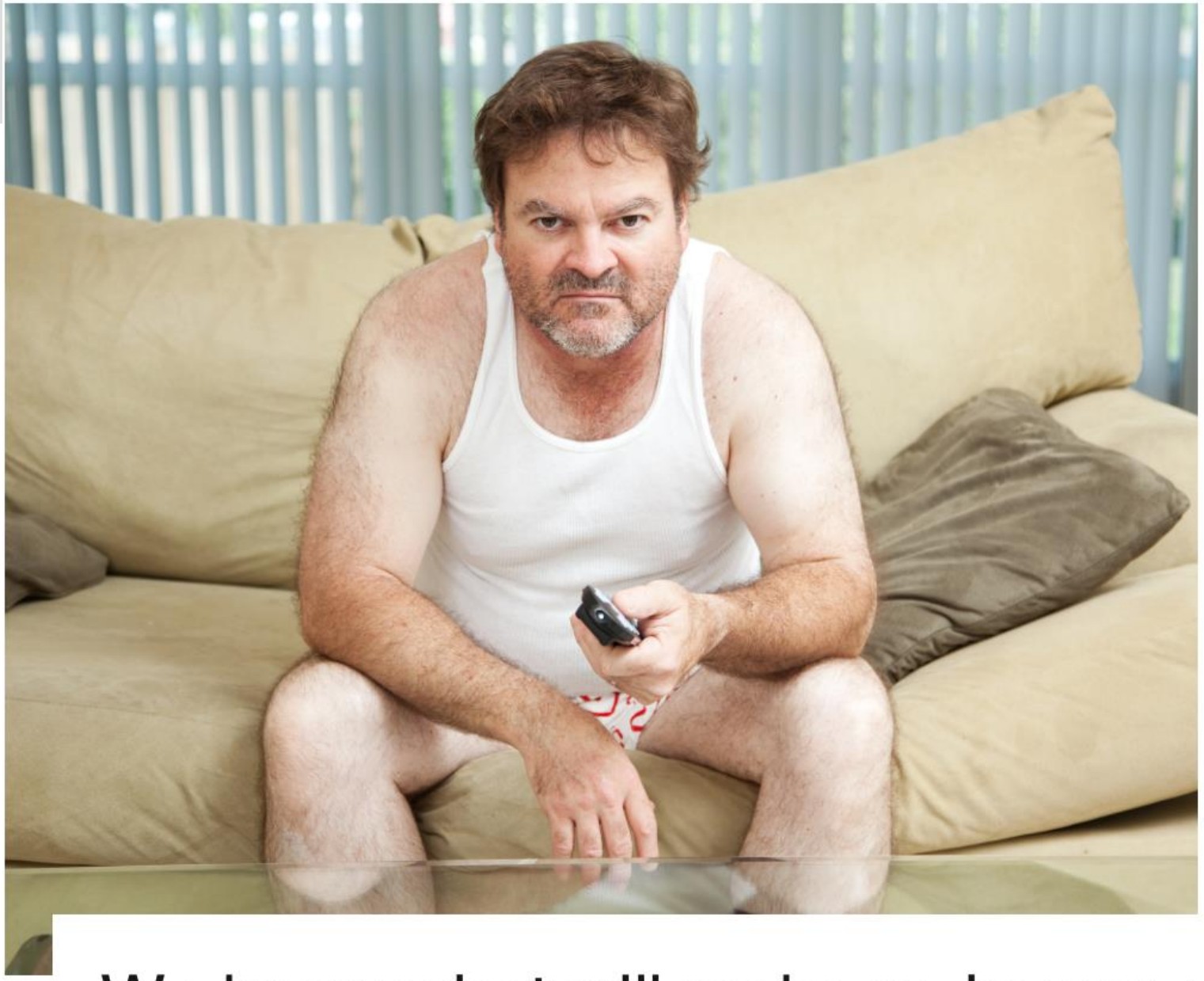


Unconscious environmental cues

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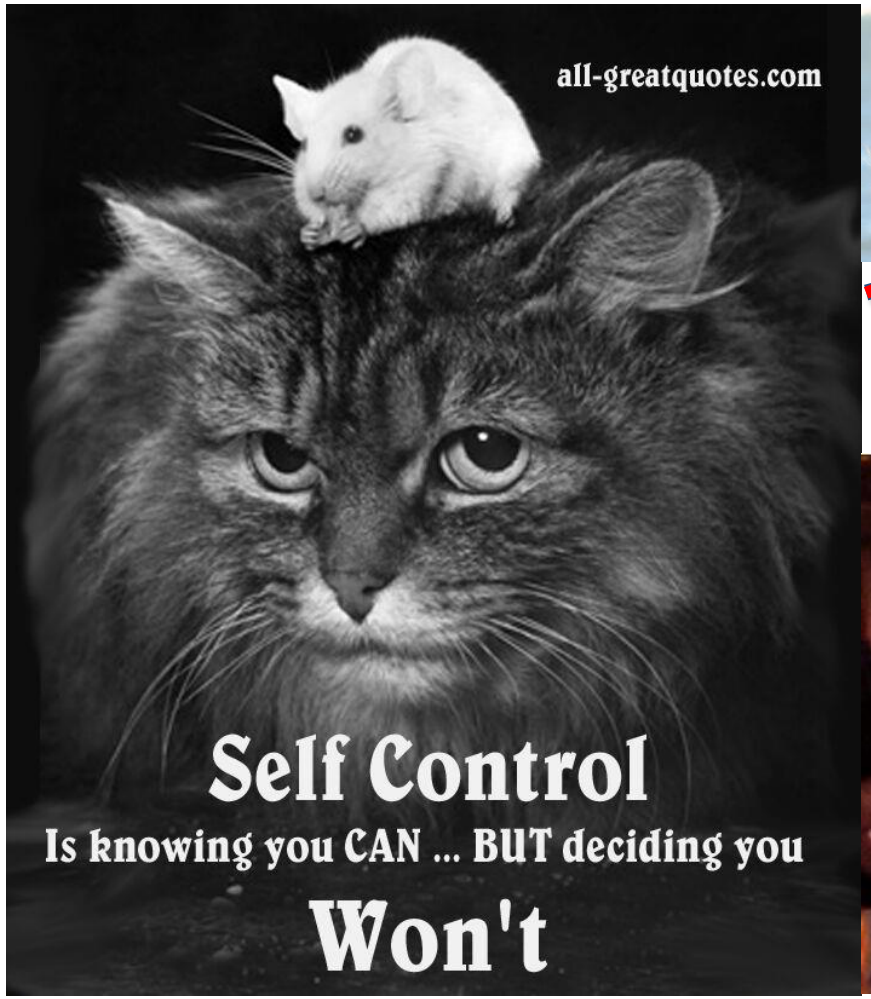
'young men think about four things, we brew one and sponsor two of them'

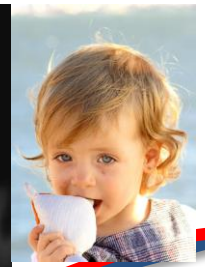


We know what will make us happy, why do we watch TV instead?

Christian Jarrett (@Psych_Writer)
BPS Research Digest

Cold control versus *hot* control







1 - Information is not protective



Information does not appear on any list of protective factors

Lack of information is no established risk factor

Not everyone wants to protect their health → then informing about health risks is pointless

Even if it is “bi-directional”, “participatory”



The Spirit Is Willing, E
People Drink More Thar
Eve

n

Florian Labhart, Kri

Background: Heavy alcohol use is
to be intentional. However, little is k
prior to the onset of drinking and wh
investigates drinking intentions at the
associated with a subsequent consump
Methods: Using a smartphone app
women) completed questionnaires on
before, during, and after multiple Fr
used to investigate individual-level an
and subsequent deviations from intent
Results: Participants intended to d
(SD = 3.9) on average. Drinking inten
and engaged in more frequent predr
(47.7%). For both genders, the numb
and being with larger groups of friend
ual and the night levels. Heavier cons
home for men and when going to nightclubs for women.
Conclusions: Making young adults aware of the tendency to drink more than intended, particularly when drinking begins early in the evening, moves from location to location, and includes large groups of friends, may be a fruitful prevention target. Structural measures, including responsible beverage ser-

Think about:

Botellón (“essential for socialisation”)

The reactions to smoking bans

How would curfew hours for youth be received?

... and can be harmful, in the ATOD field

Cannabis users are far better informed (also health literacy) than non-users (e.g. Dermota 2013)

Possessing knowledge on drugs increased the likelihood of consuming illicit drugs (Alves et al. 2020)

Characteristics deemed to be associated with lack of efficacy and/or effectiveness or with adverse effects: **Providing information on specific substances, including fear arousal** (UNODC international standards 2018)



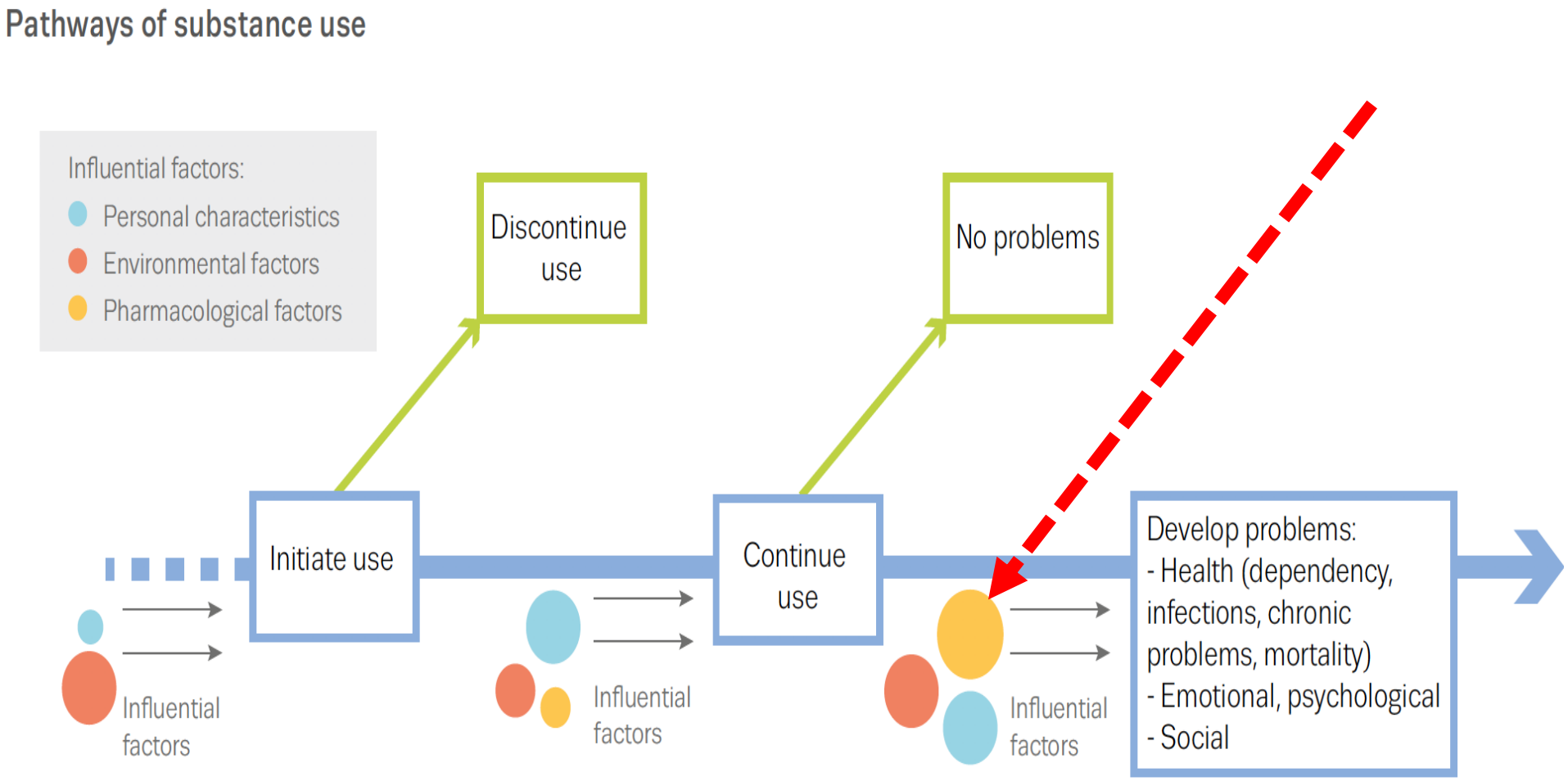
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What *does* work better

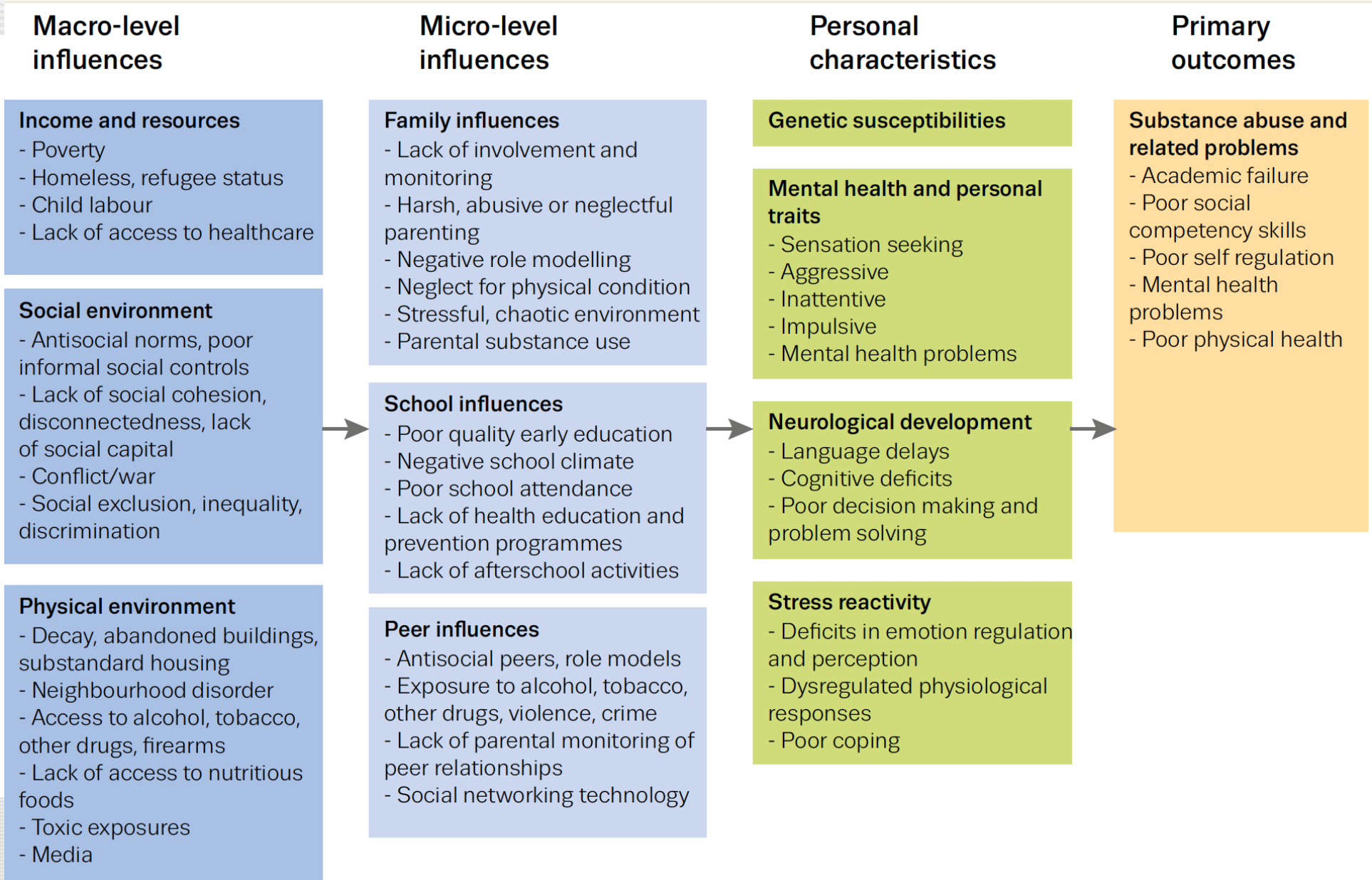
Focus on things that really affect our behaviour. Not on information



Pathways: at the start, the drug barely matters



Multi-level development framework

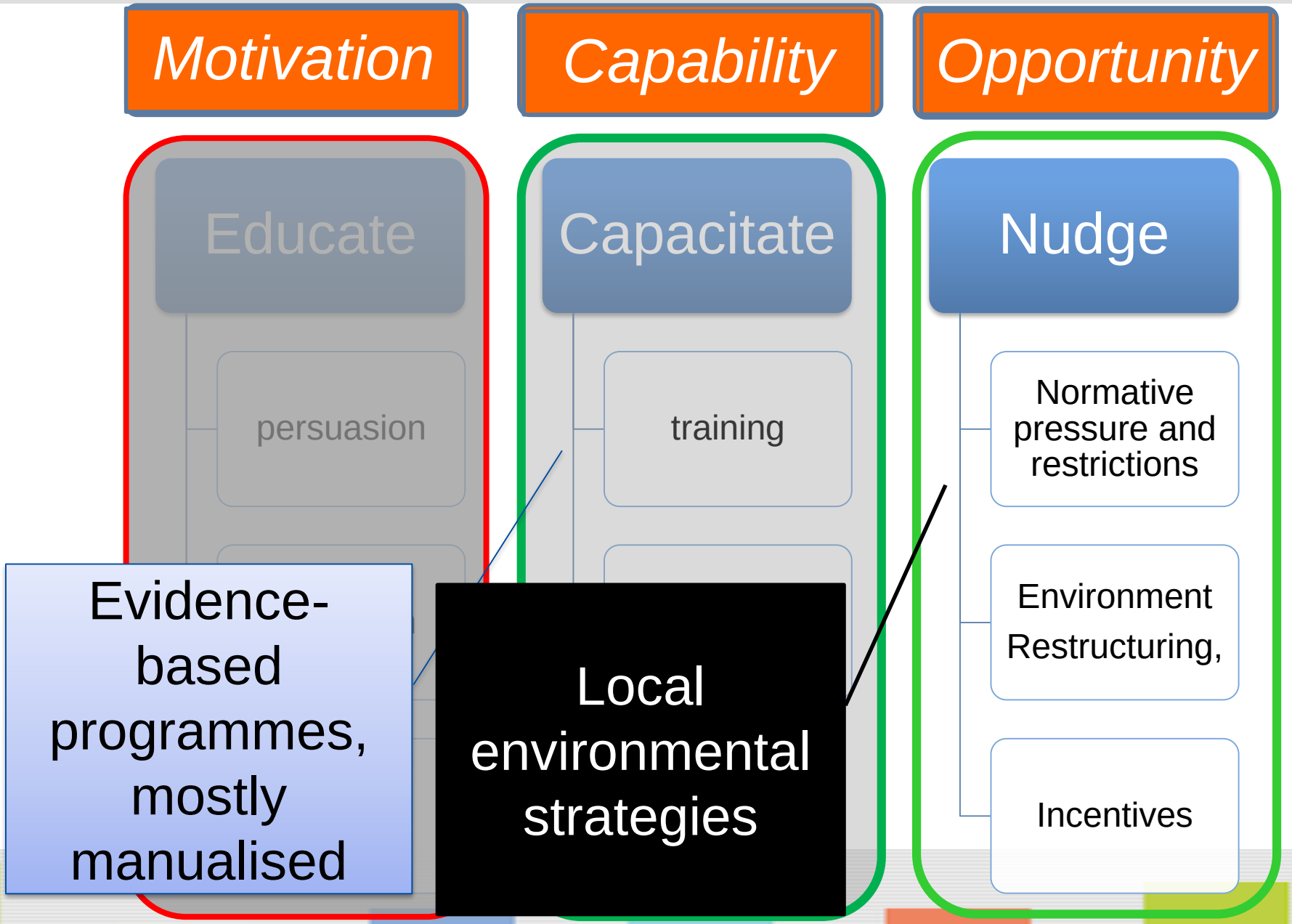


We need an intervention type that takes into account our …

Automatic decision making
Lack of self-control
Lack of introspection



Three dimensions of prevention functions



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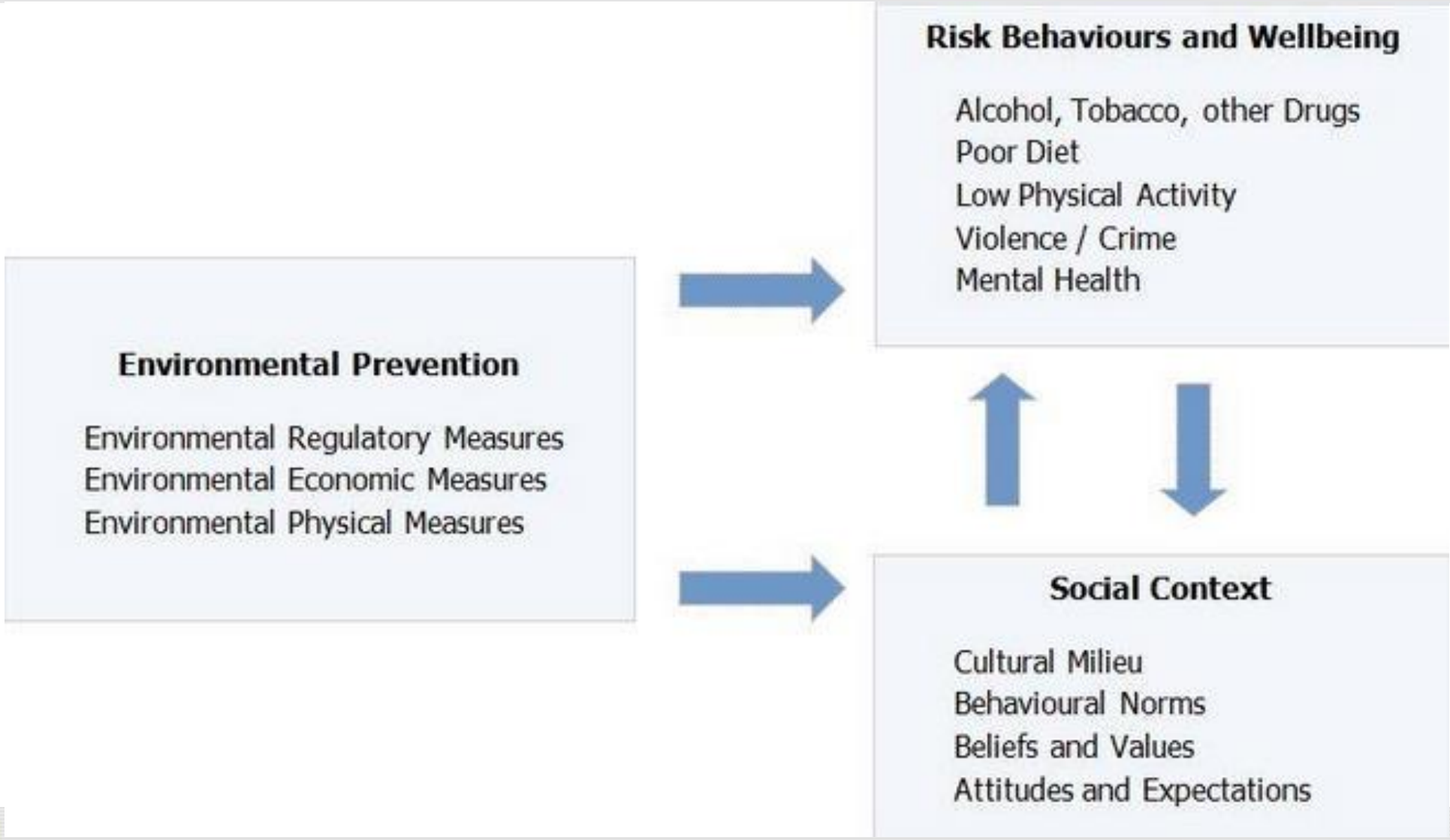
TECHNICAL REPORT

Environmental substance use prevention interventions in Europe

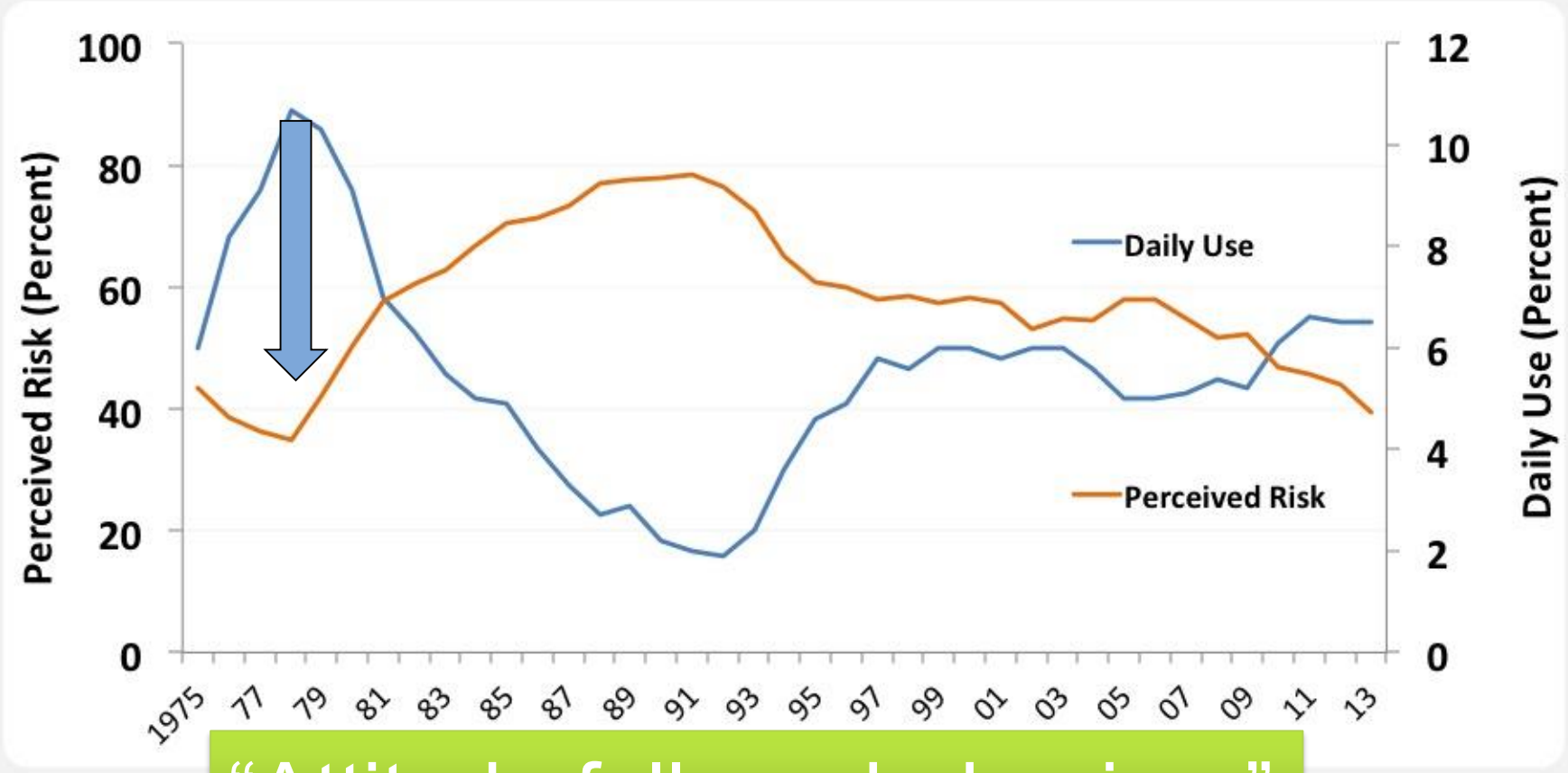
The theory behind



The theory behind



Daily Marijuana Use vs. Perceived Risk of Regular Marijuana Use among 12th Graders, 1975-2013



"Attitude follows behaviour"

Source: University of Michigan, 2013 Monitoring the Future Study

Salloum et al. (2018). A Reciprocal Effects Analysis of Cannabis Use and Perceptions of Risk.



"Attitude follows behaviour"

Don‘t focus on individual decision making only

Policies and interventions to limit exposure to unhealthy or risky behaviour opportunities (or to promote the availability of healthy opportunities).

➔ Reduce visibility, accessibility and perception of normality & acceptance

target the automatic system of behaviour (one that does not require deliberate cognition).

require lower individual ‘agency’: less need to deploy resources such as conscious decision-making, motivation and impulse control

How to apply all this



Three overlapping categories: it's not all about laws

1. **Regulatory**

Legislation on under-age drinking, or drinking and driving; local policies relating on smoking at work or school; advertising restrictions, opening hours

2. **Physical (placement, stimuli, etc.)**

Smaller alcohol glasses, snacks and free transportation in nightlife, street lighting → "choice architecture"

3. **Economic (change costs of behaviour): taxes, subsidies, pricing**

lower the cost of non-alcoholic drinks including, increase taxes and prices of tobacco products or alcoholic, subsidies to disadvantaged /vulnerable people

Universal elements – at macro level

Regulate availability

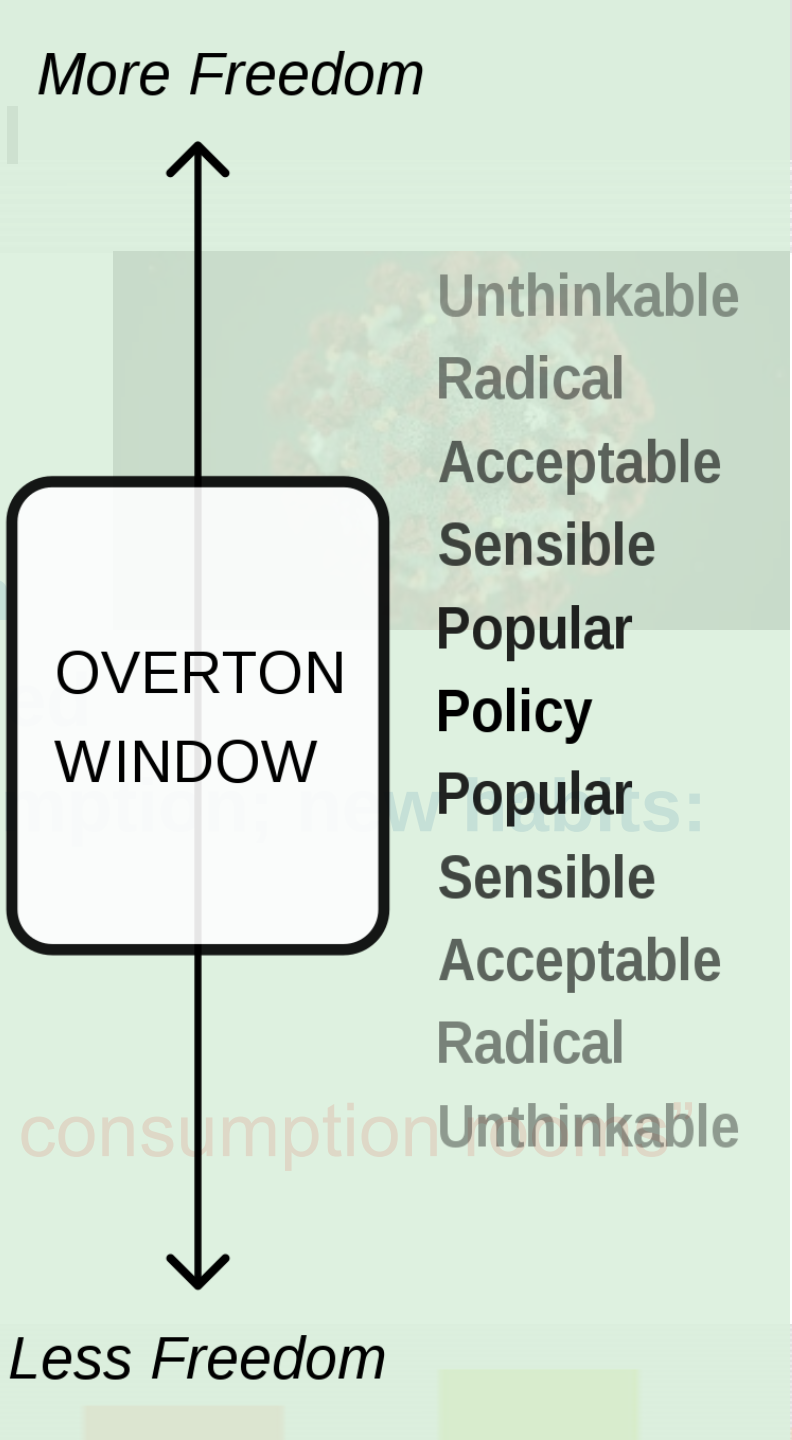
Regulate taxes and prices

Limit publicity and promotion

Limit access for the under-age

Limit opportunities for consumption: new habits:

- ✓Tobacco: ”outside only”
- ✓Alcohol: “inside only”
- ✓Cannabis: “only at home or in consumption rooms”



Local environmenta

England & Wal
mandatory

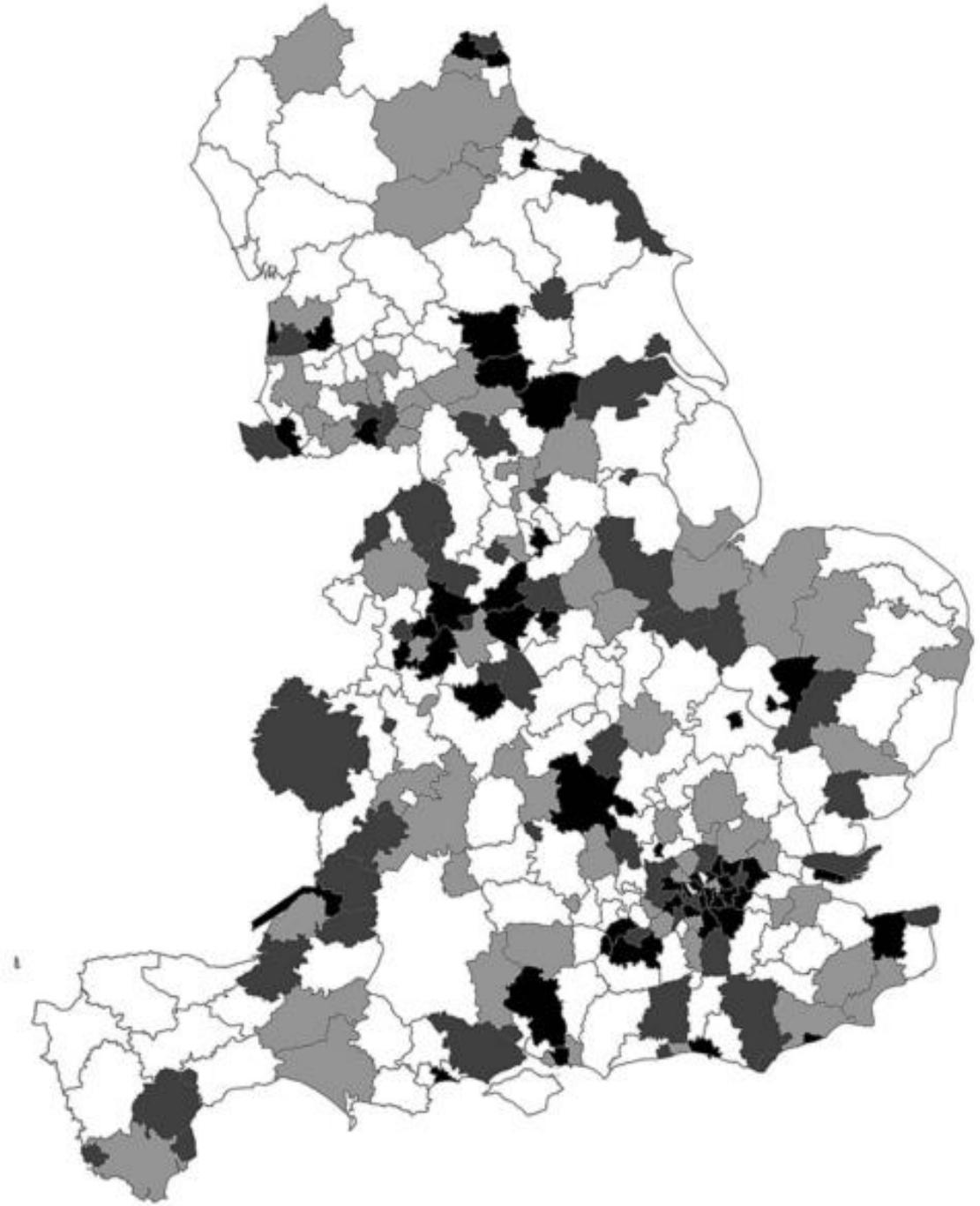
Citysafe (Liverpoo
campaigns

Tackling Alcohol-re
significant drop in

Scotland: staff

England: decli
public order of
2016)

Netherlands: id
broader societa



Beneficial:

- Interventions for which convincing, consistent and sustained effects for relevant outcomes are in favour of the intervention as found in two or more studies of excellent quality in Europe.

Likely to be beneficial:

- Interventions for which convincing and consistent effects for relevant outcomes are in favour of the intervention as found in at least one evaluation study of excellent quality in Europe.

Possibly beneficial:

- Interventions for which some effects for relevant outcomes are in favour of the intervention as found in at least one evaluation study of acceptable quality in Europe. An intervention ranked as 'possibly beneficial' is suitable for application in the context of more rigourous evaluations.

Local regulations

Addit… st… r… d

- Interventions for which concerns about evaluation quality or consistency of outcomes in Europe make it difficult to assess if they are effective or not, even if outcomes seem to be in favour of the intervention.

Unlikely to be beneficial

- Interventions for which at least one evaluation of excellent quality in Europe show convincing evidence of no or harmful effects on relevant outcomes.

Parental introduction into substances: plausible, but …



Providing sips of alcohol to children is associated with them having more favorable expectations about drinking. Murphy et al 2021

Early sipping/tasting → increased frequency and quantity of alcohol consumption and related problems in late adolescence Colder et al. 2018

Talk to the kids? (alcohol industry)

Rather a risk factor (van der Vorst 2005, 2006)

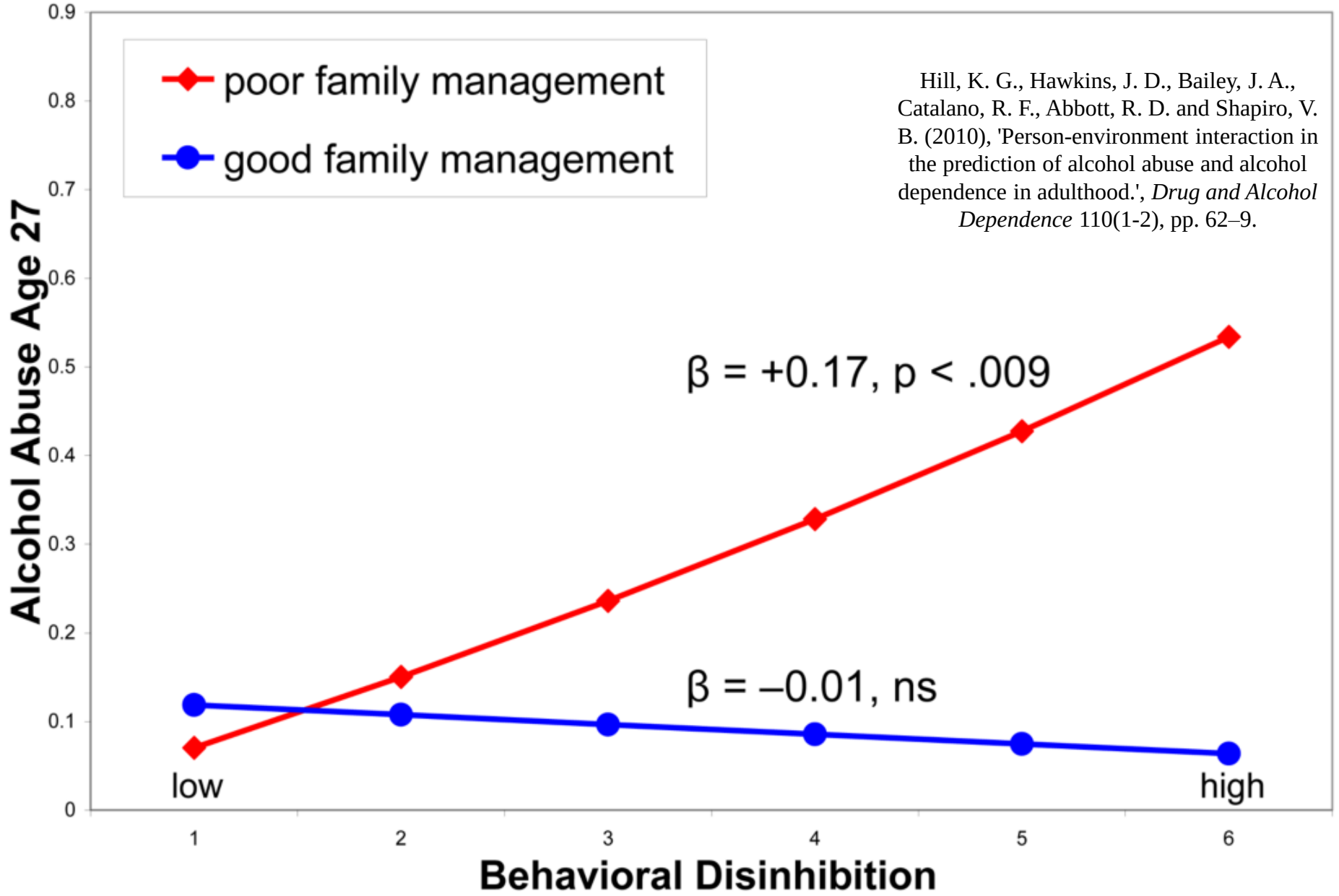
By increasing attention bias?

Not much evidence for positive behavioural effects

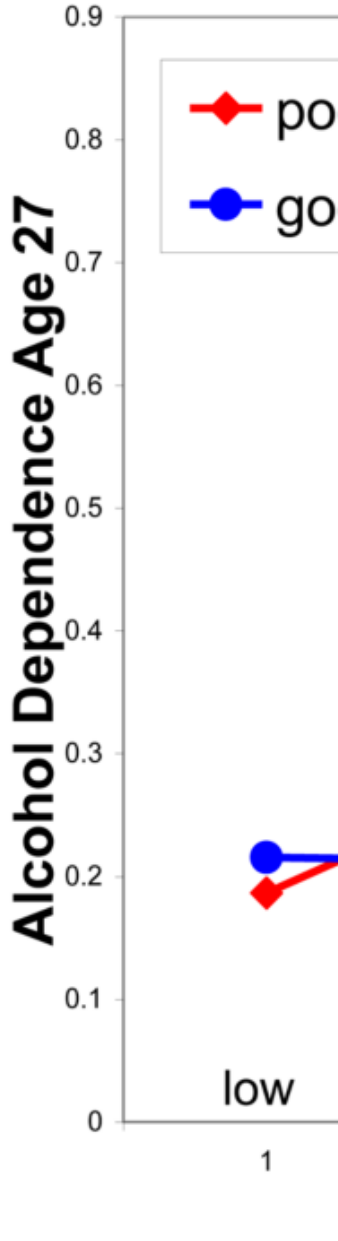
Except: communication about house-rules



Parental skills and neuro-behavioural disinhibition



Hill, K. G., Hawkins, J. D., Bailey, J. A., Catalano, R. F., Abbott, R. D. and Shapiro, V. B. (2010), 'Person-environment interaction in the prediction of alcohol abuse and alcohol dependence in adulthood.', *Drug and Alcohol Dependence* 110(1-2), pp. 62–9.



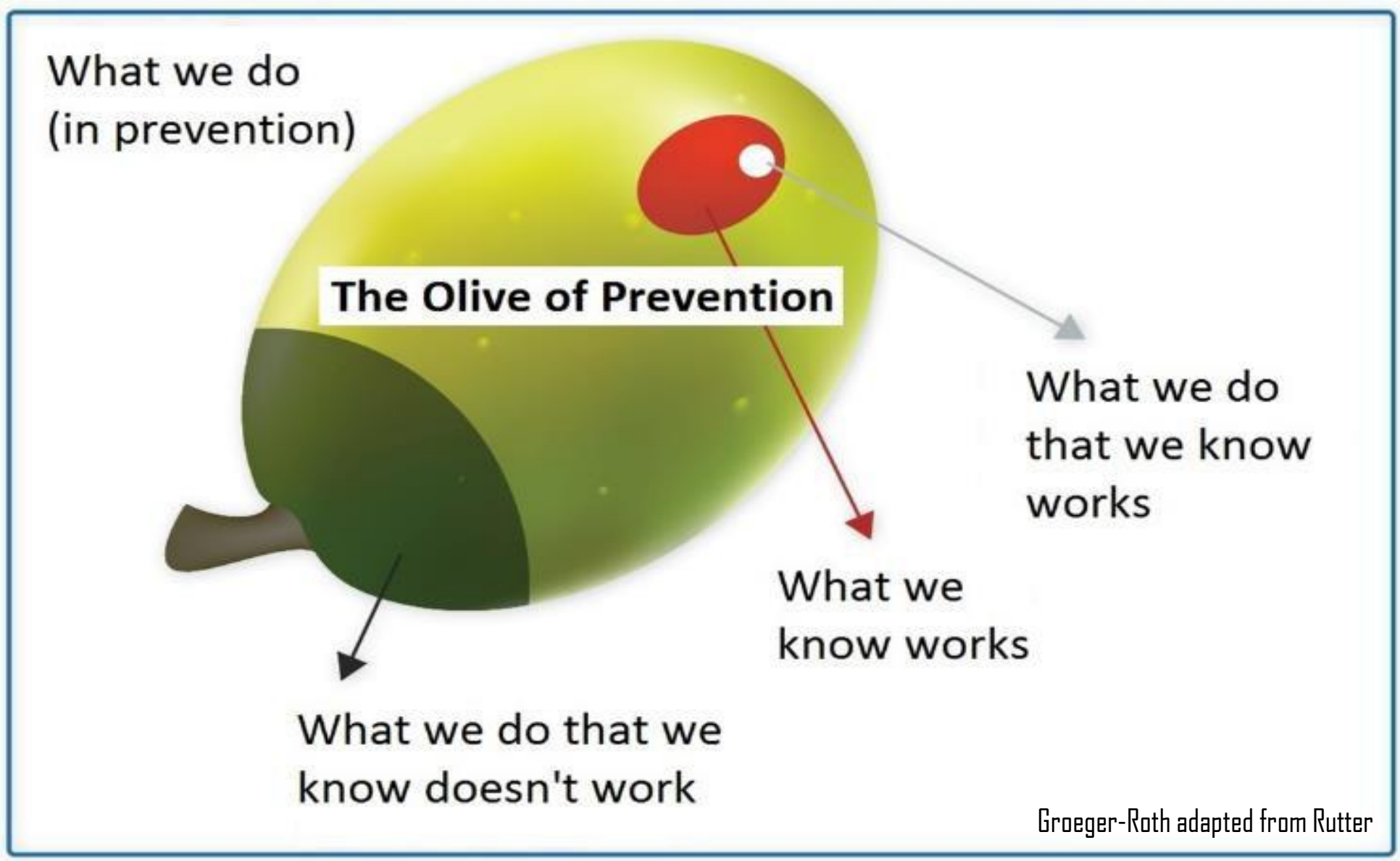
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Even if the evidence was easy…

… it wouldn't be sufficient to improve decision making

The olive of evidence



No evidence (yet?!) in the UNODC standards

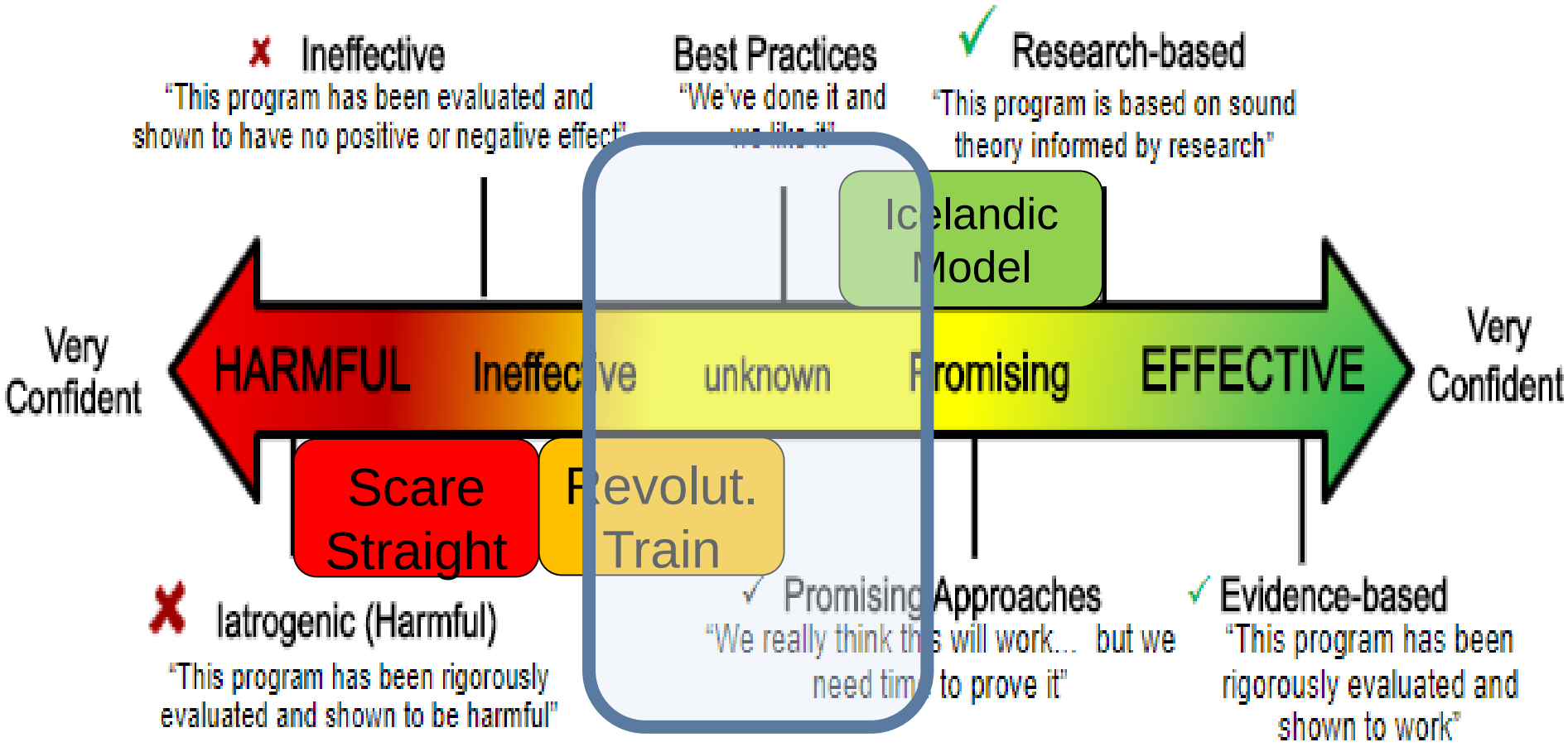
Sports and other leisure time activities

Targeting children and youth particularly at risk:

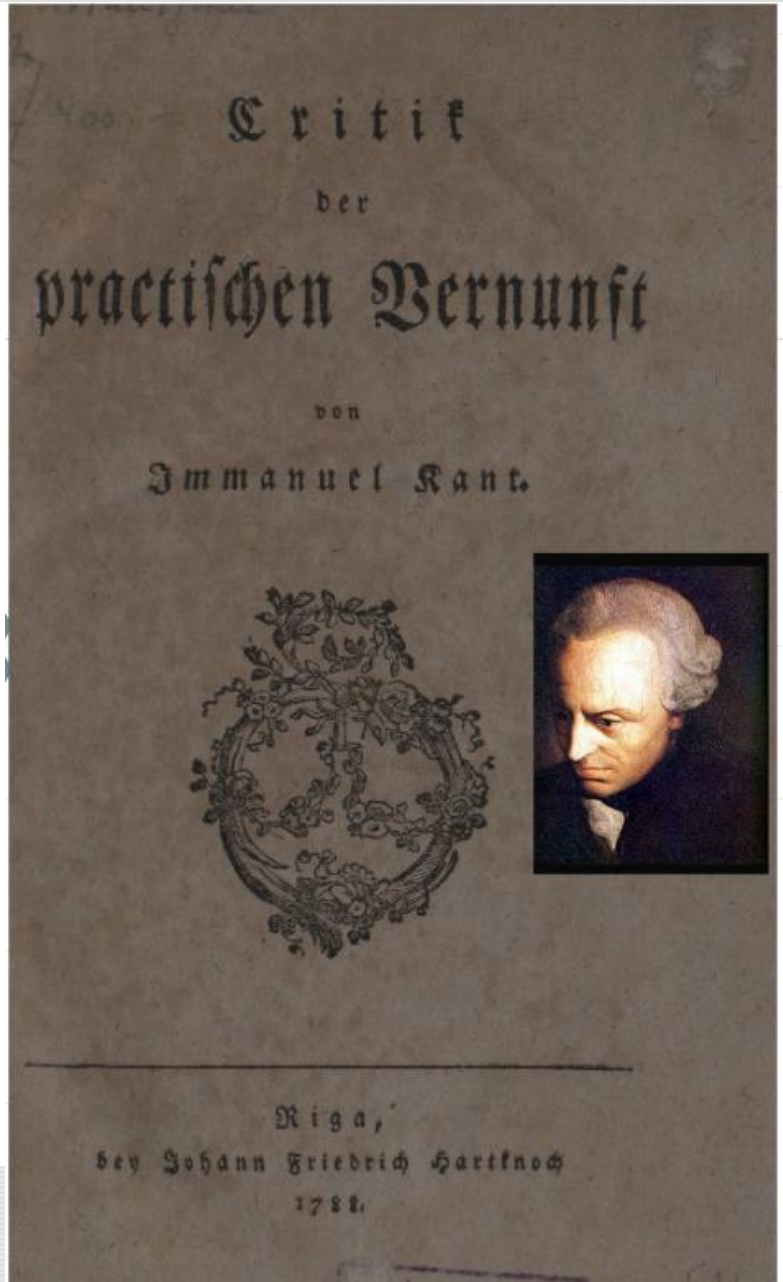
- out-of-school children and youth,
- street children,
- displaced or post-conflict population,
- children and youth in foster care, orphanages, in the juvenile justice system.

Prevention of the use of NPS

When is an intervention evidence-based?



Decide ethically if there is uncertainty



→ do it if there is clear evidence from good outcome evaluations

→ do it carefully (i.e. with additional evaluations) if the evidence is unclear

→ don't do it if the evidence is unclear and if there is the slightest hint for iatrogenic effects (ex-drug users as testimonials)

The policy-maker's dilemma in prevention

It's not always lack of knowledge

Evidence-based, but complex

Less visible or too confrontational

Social influence programmes
School climate
Parenting programmes
Environmental prevention
Nightlife regulation

Effects: *positive*

Easy production and roll-out

Highly visible: political capital

Seminars, conferences
Leaflets, flyers
Parents' evenings
Information days, Expert visits
Mass media campaigns

Effects: *zero - neg.*

COVID: similar cognitive failures, repeated

A badly implemented programme = not reinforced rules

Rely on information only, without choice architecture (to transform information into habits)

Forgetting social gradients (*can* you isolate at all?)

Cognitive bias: “strangers are more risky than family”

#Facts4EUFuture #Enlightenment2

How a better understanding of human behaviour can put knowledge and reason at the heart of political decision-making.



#Enlightenment2 #Facts4EUFuture

European Commission

Well-marketed messages from the field

“Feeling well in your skin” is protective

Informed choices

Finally *something* is being done

Send a “clear message” to young people

Environmental prevention is anti-hedonistic, and restricts personal freedom

Don’t let bureaucrats decide on your cup sizes

Population-based interventions increase stigma



… inspiring for those who



Prevention is more than raising awareness

Beware of harm to our children

The better options can be less expensive too

Decision and policy makers have a large array of interventions a
that are both effective and visible, yielding political capital. Why
responsible and caring at risk for being associated with controve
approaches, only because some influencer is personally convinc
proper science-based evidence?

Police staff interested and concerned with prevention have ple

5

Hints for action and practice

For police, decision makers and the frontline

Some optimism

”COVID-19 could provide the impetus for greater ascendancy of public health ethics over clinical ethics”



Clear need:

Decisions to be made with a sense of: “we must act under uncertainty”

Focus on neighbourhoods and communities



SWaPOL

SOCIAL WORK AND POLICING

Vocational Training in Public Order Management

SWaPOL is an education & training project that focuses on public order management in urban places. This project contributes to a good balance between welfare and law enforcement policies by developing a joint training for social workers and crime prevention officers in the police in several European countries. A pilot course (5 days) has been developed and tested in all partner countries and can now be integrated in existing vocational training schedules at schools of social work and in the police force. The themes selected for this training are

- substance use among young people: prevention and harm reduction in nightlife
- the problem of homelessness.

http://www.swapol.eu/

Focus on neighbourhoods

Enforce drink driving rules

Enforce youth curfew hours (lobby for them)

Control alcohol sales to minors and enforce legislation

Set up youth-driven neighbourhood watch schemes (Lithuania)

Be present in school surroundings, not *in* schools

Help to set up safe and clean playgrounds and leisure time offers

Hawkins & Catalano: *Communities that Care*

Risk Factors	Adolescent Problem Behaviors				
	Substance Abuse	Delinquency	Teen Pregnancy	School Drop-Out	Violence
Family					
Family history of the problem behavior	●	●	●	●	●
Family management problems	●	●	●	●	●
Family conflict	●	●	●	●	●
Favorable parental attitudes and involvement in the problem behavior	●	●			●
School					
Academic failure beginning in late elementary school	●	●	●	●	●
Lack of commitment to school	●	●	●	●	●
Peer and Individual					
Early and persistent antisocial behavior	●	●	●	●	●
Rebelliousness	●	●		●	
Friends who engage in the problem behavior	●	●	●	●	●
Gang involvement	●	●			●
Favorable attitudes toward the problem behavior	●	●	●	●	

Safer environments

Crime-prevention = Drugs prevention

Same risk factors apply (at least in early adolescence)

Police has important roles in community-based prevention, and environmental prevention, particularly in nightlife.

Proximity policing, reinforcing social norms: (e.g. alcohol licensing and sales to minors)

EUPC



European Monitoring Centre
for Drugs and Drug Addiction

MANUALS EN

ISSN 1725-339X

European Prevention Curriculum

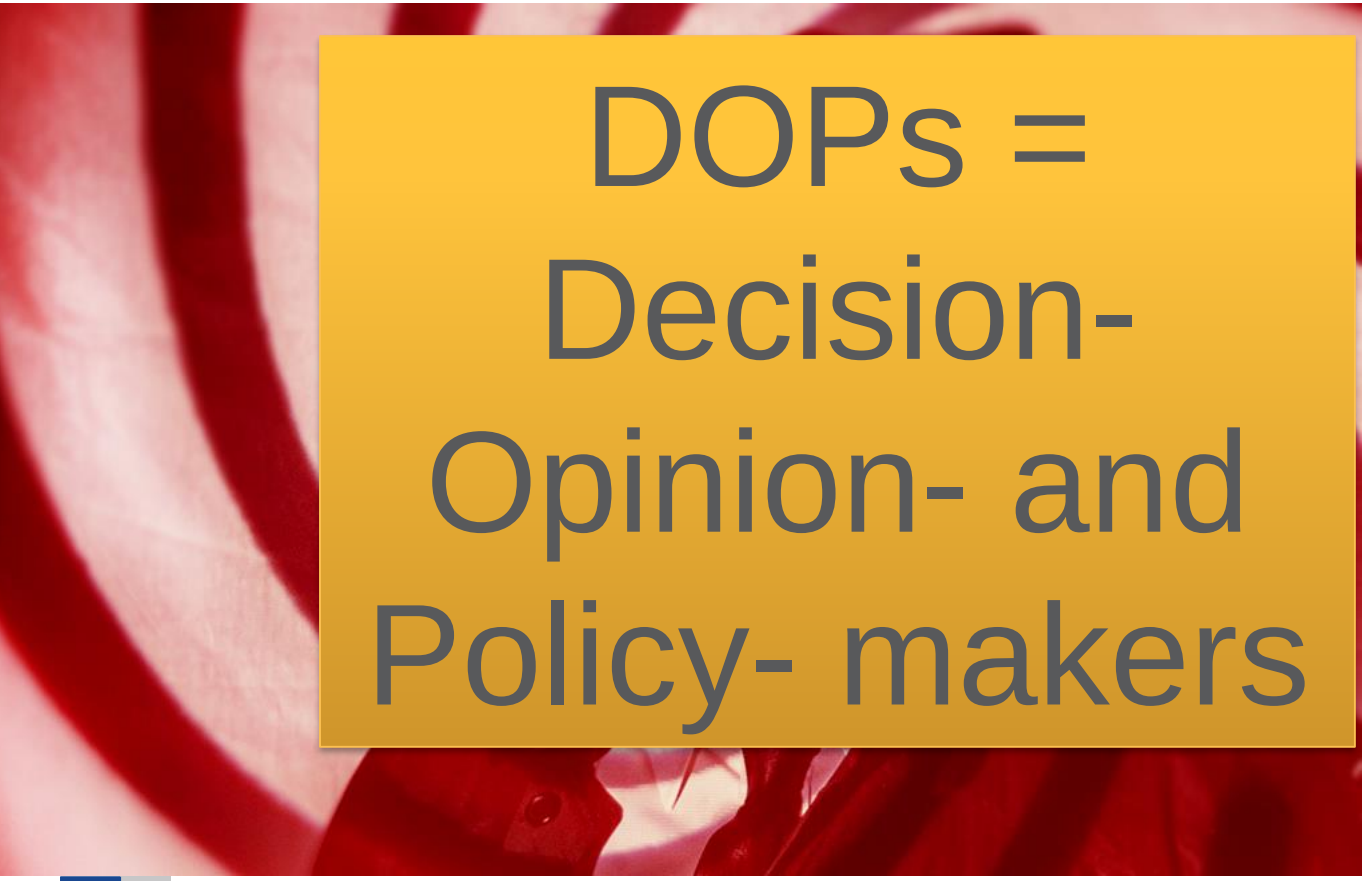
A handbook for decision-makers, opinion-makers and policy-makers in science-based prevention of substance use

11



Whom do we have to target with Training?

In Europe: strategic decisions might be at national level



.. but money is at local/regional level

Don‘t train professionals if their bosses haven‘t been trained!

Short training, online

Law Enforcement AND Health professionals

What is in

Epidemiology, substance use and why is prevention important

Language of prevention: from evidence to practice

The evidence-based approach in prevention. The International Standards for Drug Use Prevention and the European Drug Prevention Quality Standards (EDPQS)

School-, workplace- and family-based prevention

Monitoring and evaluation

Media

Enhanced elements in the European version

Environmental prevention

Particular lack of attention to it, little regulation

Legalisation might be on the doorstep

Nightlife interventions

A particular European phenomenon and industry

With out-dated intervention types

Advocacy

Since bottom-up and communitarian approaches are less common

Since policy makers act against better knowledge

Take home for police: Dos and Don'ts

Do:

Be present in nightlife

… and around schools

Engage with deprived neighbourhoods

Control alcohol serving practices

Inform about the law and its application

Do not:

Go into schools with

- Drug samples
- Warning information

Engage with youth with:

- Scare tactics
- Sniffer dogs

Prevention after COVID19

Children and youth have been let down – this has to be atoned for

Have more effective policies in place now

Mental health among young people has suffered most

(Substance use wasn't the main issue)

Roll-out effective prevention programmes that promote social and personal skills & social-emotional learning

Framing: "Rebuild mental resilience – we have the tools already"

Evaluate this

Make them available online (be prepared)

Take home for other frontline professionals

“Meaningful engagement of youth” is not: “have them co-design interventions”

Prevention is more about Public Health, not (all) about social work (= service to individuals)

Regulations are not “prohibition”

Don’t rely on “risk perception” or the “right message”

A last word about “it’s effective”



LET'S MAKE PREVENTION SAFER

Questions or expressions of anger?

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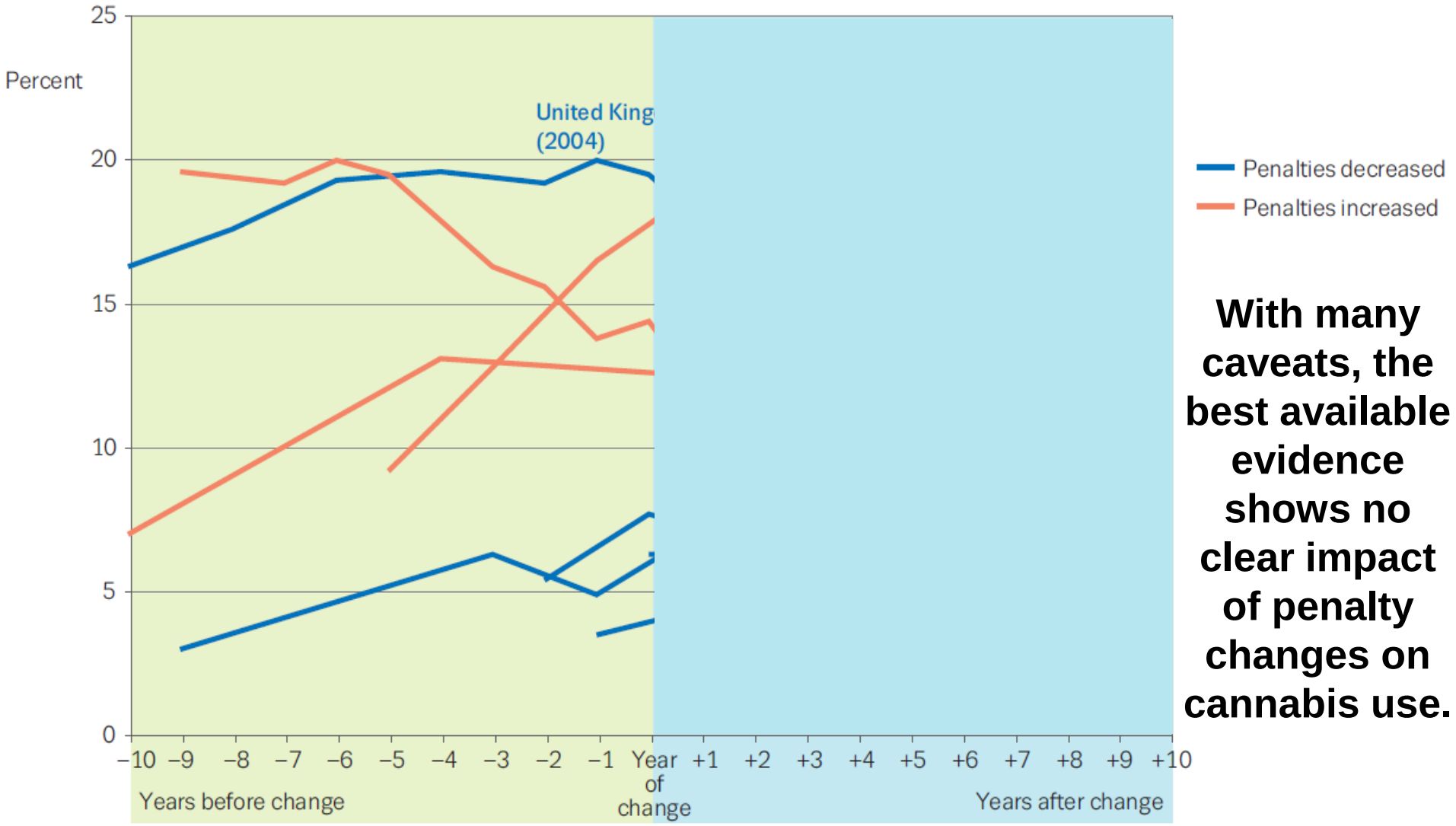
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Cannabis use before and after changes in legislation in selected countries: use in previous 12 months among young adults (age 15-34)



With many caveats, the best available evidence shows no clear impact of penalty changes on cannabis use.