



European Monitoring Centre  
for Drugs and Drug Addiction

# ***Prevention, EDDRA, logic model and evaluation***

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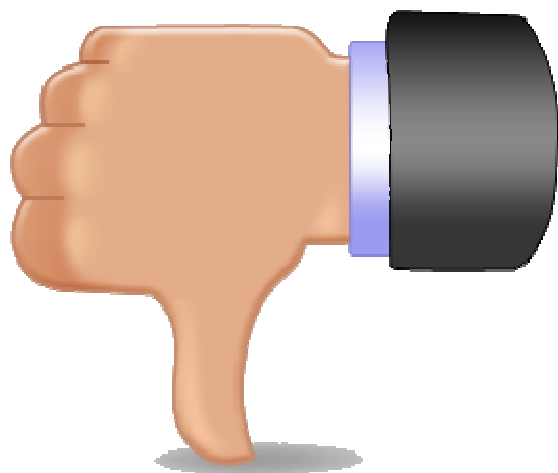
**Croatia, November 2012**

Gregor Burkhardt, EMCDDA

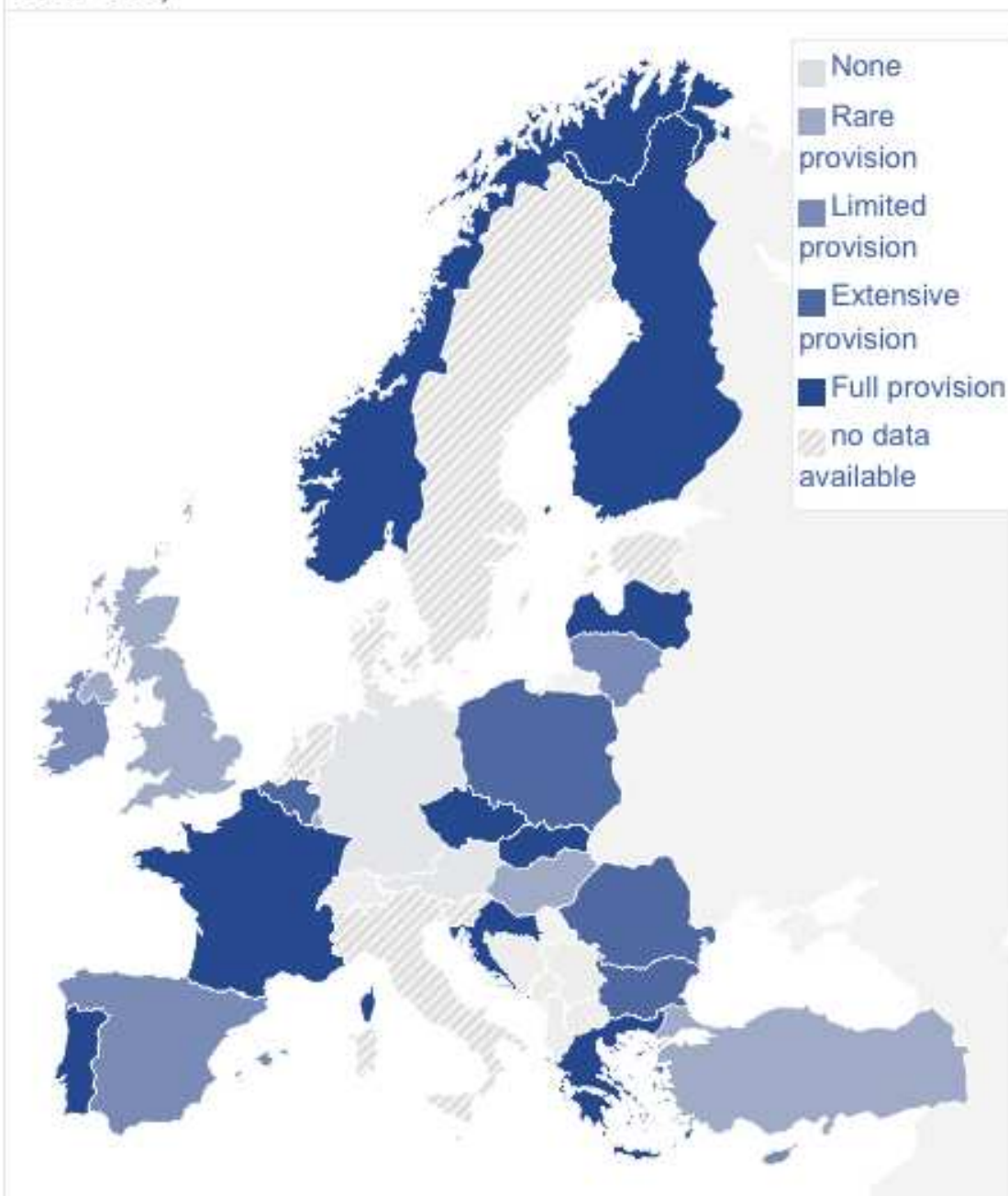
[www.emcdda.europa.eu](http://www.emcdda.europa.eu)



Only  
***information*** on  
drugs 2010 (no  
social skills, etc)



Universal prevention: Only information on drugs (no social skills etc.)

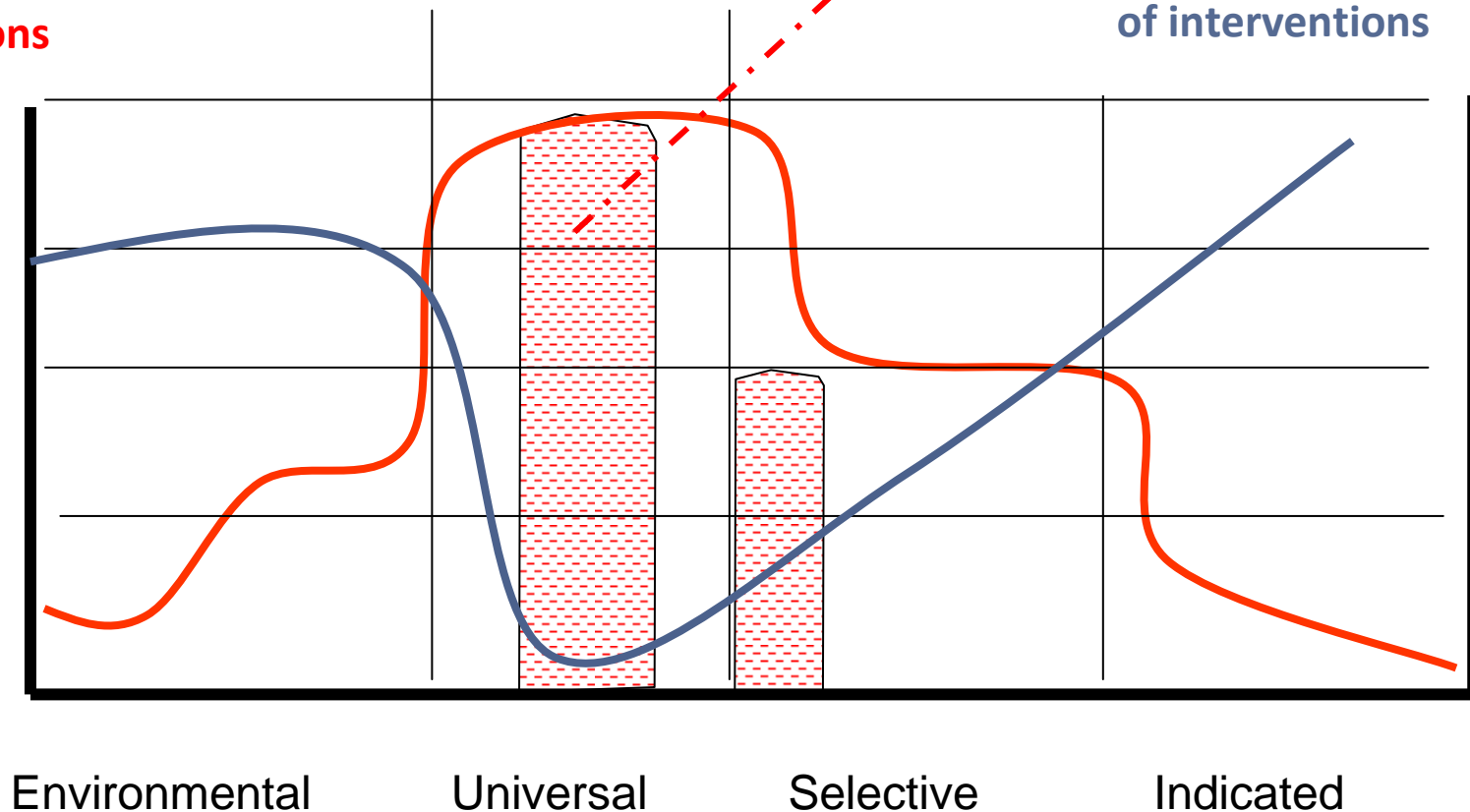


# Availability and expectable effects of interventions

Availability  
of interventions

Effects  
of interventions

Information  
provision



## Advisory Council for the Misuse of Drugs

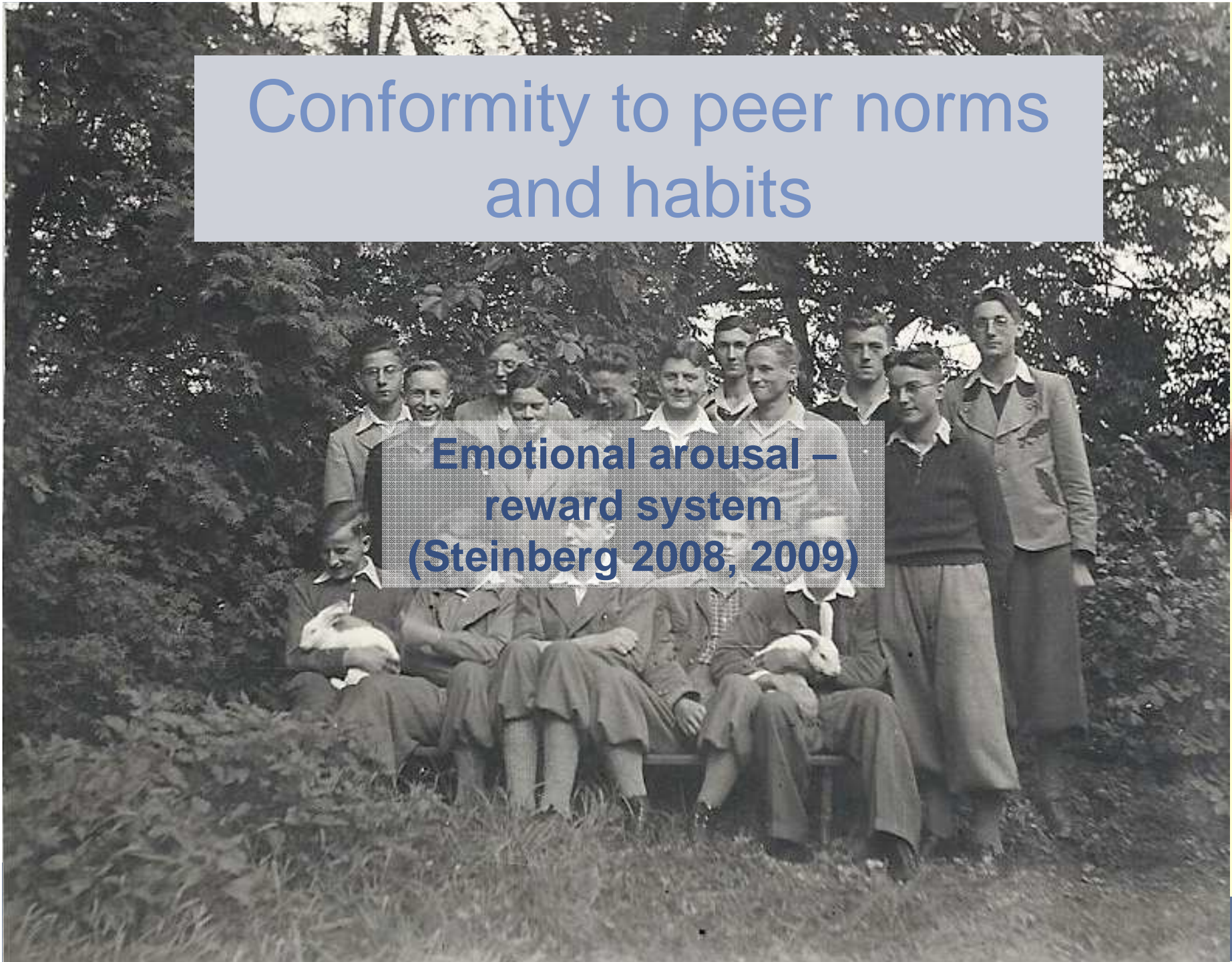
“... There should be a careful reassessment of the role of schools in drug misuse prevention”

**“The emphasis should be on providing all pupils with accurate, credible and consistent **information** about the hazards of tobacco, alcohol and other drugs, including volatile substances”**



# Conformity to peer norms and habits

**Emotional arousal –  
reward system  
(Steinberg 2008, 2009)**





Impulsive,  
Risk seeking,  
Affective intensive,  
Peer-oriented  
Social Primacy

# PEER PRESSURE

Knowing that something is beyond stupid and going ahead and doing it anyway.

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# So?

- Information provision might be good in low-risk situations
- ... for the privileged
- What counts is perceived “normality”
- → danger of warning campaigns
- → importance of social norms





## Environmental prevention

- change the
  - physical
  - economic
  - social
  - virtual



- ... environments, in which people take their decisions about substance use – ‘scaffolding’

# Different levels of environment

- Macro – society and economy: taxations, regulations
  - Buying age limitations (Wagenaar et al. 2002)
  - Prices y taxes on alcohol (Wagenaar et al. 2010)
- Meso – physical and social contexts: school, community, recreational settings
  - Rules and climate in schools (Fletcher 2007)
  - Presence of cannabis in schools (Kuntsche et al. 2006)
  - Outlet and licences' density
- Micro – proximal and emotional contexts: family
  - Drinking rules in families vs 'talking' (van der Vorst 2006 y 2007)
  - Pocket money (Bellis & Hughes 2007)

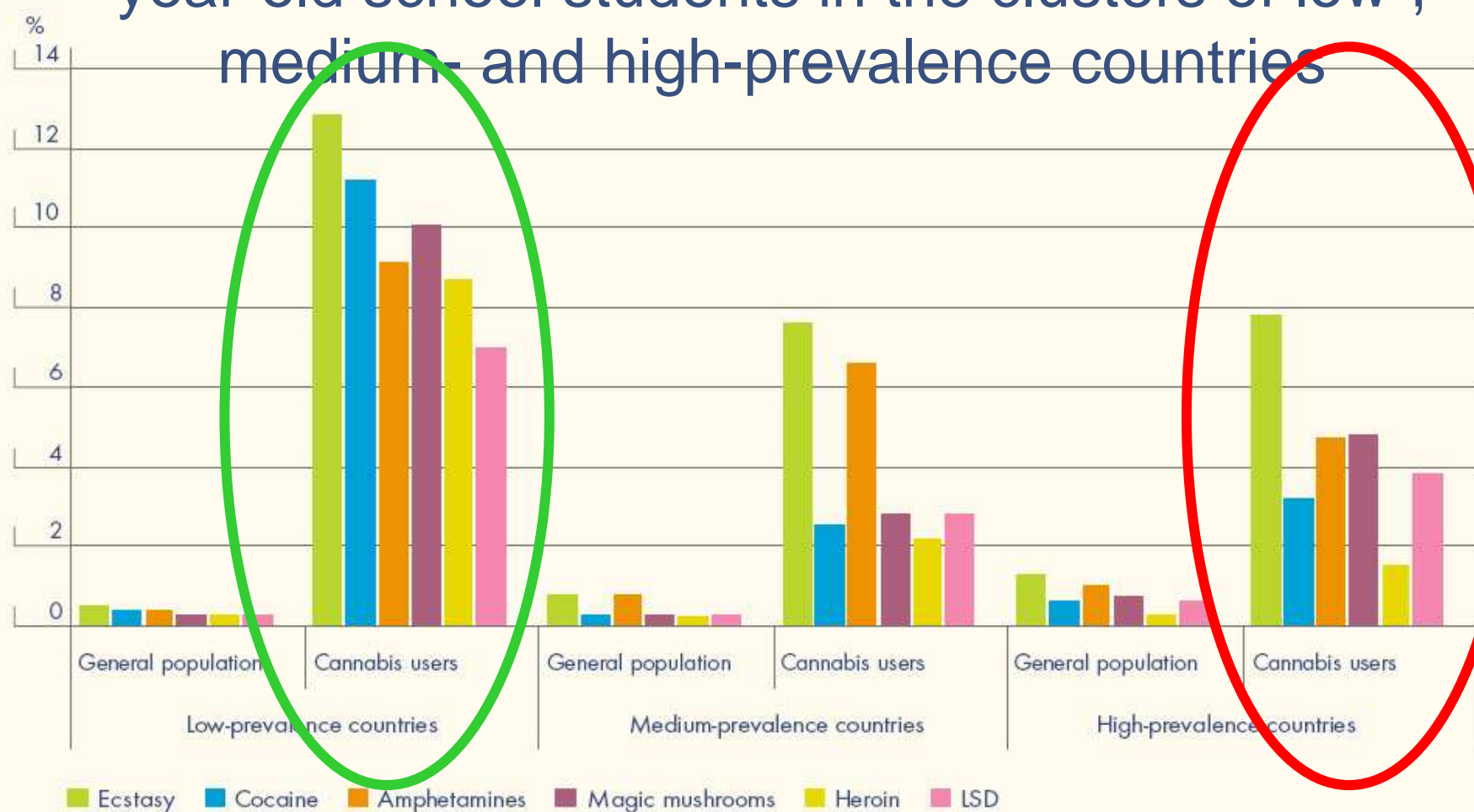


# What is environmental prevention?

- Modify context
- Persuasion is not essential
- See alcohol, tobacco, cannabis and cocaine as connected – by context of consumption
- Focus on social norms (perception) as the determinants of initiation
- ... without criminalising individuals (ineffective)
- Regulate leisure, alcohol and tobacco-industries
- Alcohol, tobacco, obesity are *Industrial Epidemics* (D'Intignano)

**‘young men think about four things, we brew one and sponsor two of them’**

# Use of selected illicit drugs during the last month among cannabis users and among all 15- to 16-year-old school students in the clusters of low-, medium- and high-prevalence countries











## Two complementary main challenges

### At population level

- **Normality:** address descriptive norms (what we consider normal and acceptable)
- Environmental prevention
- Alcohol, Tobacco, Inequality

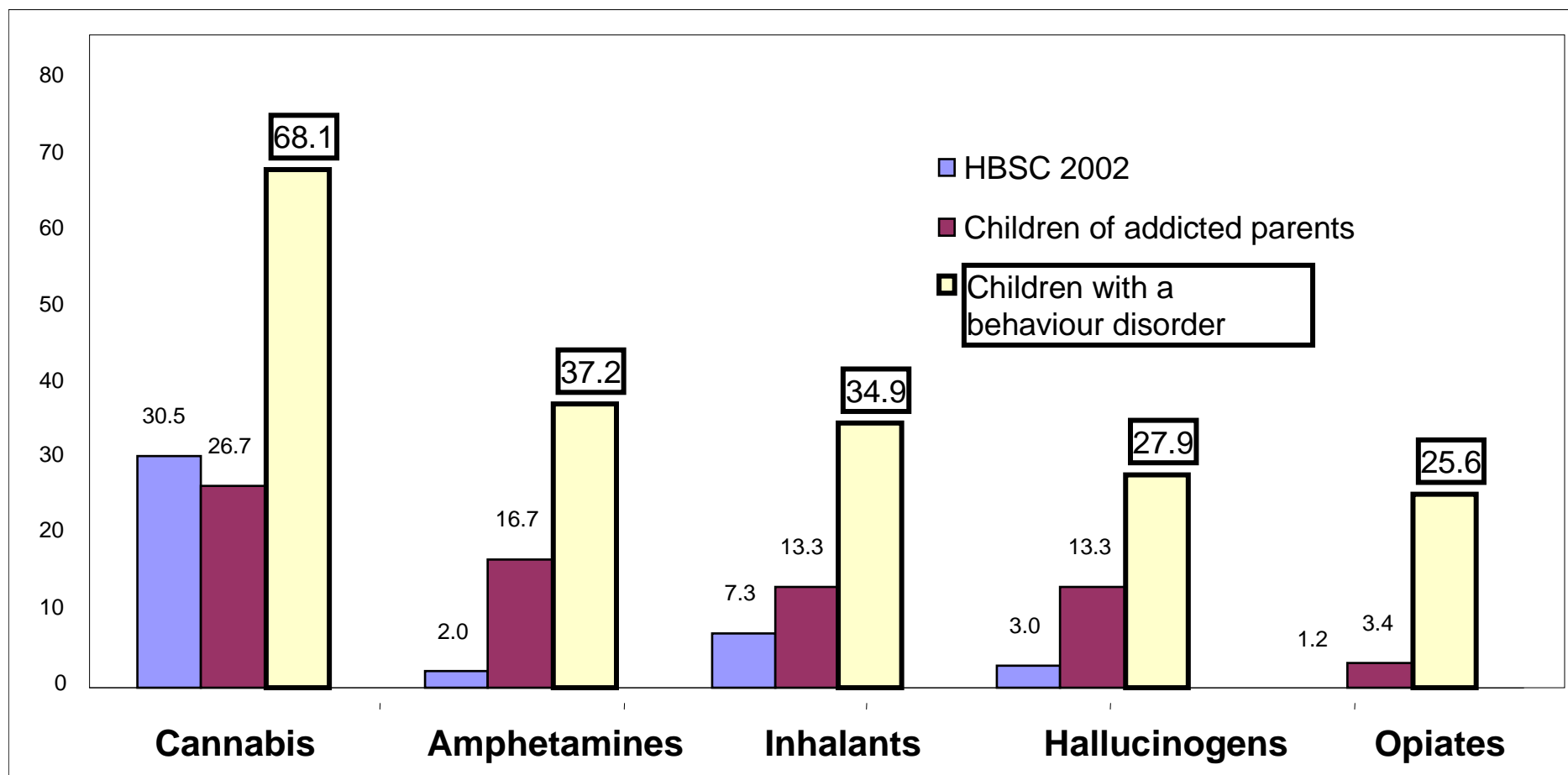
### At individual level

- **Cater for the vulnerable**
  - Who are they?
  - How to approach them?
  - How to protect them?
- **Treatment**



# Vulnerability at individual level

*Lifetime prevalence of illicit drug use among children of addicted parents and children placed in a health or educational facility as a result of behavioural disorders in comparison with the results of HBSC study 2002 in % in the Czech Republic. Czech National Report 2007, Csémy et al. 2003*





## Vulnerability traits – in individuals

- Male
- Early aggressiveness
- Lack of impulse control
- Sensation seeking
- ADHD, Conduct disorders



# Vulnerable individuals

Trajectories from early childhood

## **Objectives:**

Avoid rapid escalation (from experimental to heavy use)

Achieve controlled use

Limit associated risk behaviours

## England: Preventure (Sully & Conrod 2006)

- Pupils, 13 – 16 years old
- Anxiety/Sensitivity - Sensation Seeking - Impulsivity - Negative Thinking
- 2 session intervention workshop in group format (90 and 60 minutes).
- Focus of coping with own personality
- 12 month follow up: reduction in binge drinking, frequency and quantity of drinking and also of: depression, truancy, panic attacks and impulsivity
- NNT: 2



## What I actually wanted to say

- Impulse control seems to be the common determinant of many problem behaviours
- It can be tackled even in universal and environmental prevention by **external (social)** control
- ... and in indicated programmes by increasing **internal** control
- Most traditional prevention (and harm reduction) approaches ignore this:
  - They rely mostly on cognitive processes (information)
  - ... and on self-competence of the individual





## Decisions in prevention

- Persuasion ⇔ Scaffolding
- Cognition ⇔ Emotion
- Being informed ⇔ being aroused
- Being alone ⇔ being in a group
- Being vulnerable ⇔ being in a risky environment

## Prevent any use?

- Prevention strengthens and facilitates socialization
- ... which is not necessarily abstinence
- Socialization means to transmit accepted attitudes, norms, beliefs and behaviours
- At population level
- In vulnerable groups and individuals

# Prevention is evidence- based Socialisation

Sloboda, Z. and Petras, H, A Conceptual Foundation for Prevention, in Sloboda, Z. and Petras, H. (Eds.),  
Advances in Prevention Science: Defining Prevention Science, Springer Press, forthcoming.

# Several possible forms of Good Practice

- Prove that your intervention is in line with existing evidence

## ➔ Process evaluation

- Sound intervention design and
- proper implementation

### **PROCESS:**

***“...well done?”***

- Establish evidence directly from your intervention

## ➔ outcome evaluation

- sound evaluation design and indicators
- Effect size measures

### **OUTCOME:**

***“... effective?”***





EMCDDA | Evaluated examples of best practice in Europe: EDDRA - Mozilla Firefox



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http://www.emcdda.europa.eu/themes/best-practice/examples

EMCDDA | Evaluated examples of be...

 European Monitoring Centre for Drugs and Drug Addiction

# EDDRA

Search     
Advanced search

Drug situation Themes Responses to drug use Drug policy and law Publications Press room News About EMCDDA

EMCDDA > Responses to drug use > Best practice portal > Examples

### Responses to drug use

#### Best practice portal

Evidence of efficacy

- Universal prevention
- Selective prevention
- Pharmacological treatment
- Psychological treatment
- References

Tools for evaluation

Standards and guidelines

Examples: EDDRA

#### Responses areas

Prevention

Treatment

Harm reduction

Prevention of drug-related crime

Drug supply reduction

Data collection tools

Evaluation instruments bank (EIB)

## Examples of evaluated practices: EDDRA

Welcome to the Exchange on Drug Demand Reduction Action (EDDRA), which provides details on a wide range of evaluated prevention, treatment and harm reduction interventions, as well as interventions within the criminal justice system. [More about EDDRA...](#)

### Find projects by characteristics

#### By type of intervention

**Prevention**  
environmental strategy, universal, selective, indicated

**Treatment**  
drug free treatment, pharmacologically assisted treatment, withdrawal treatment

**Social reintegration**  
education, employment, housing

**Harm reduction**  
reduction of overdoses, prevention of infectious diseases, drug consumption rooms

**Interventions in the criminal justice system**  
assistance to drug users in prison, alternatives to prison

### Other criteria

#### By target group (universal)

general population, children/young people, adults, family/parents

#### By type of approaches

offenders, ethnic, family/first childhood, gender, telephone help-line, mass media campaign, peer, community involvement, training for professionals, networking, self help

#### By type of evaluation

process evaluation, outcome evaluation

#### Substance-specific interventions

Some interventions are targeted at a specific substance (in contrast to the majority of projects which cover a range of substances). Click on a substance to see the associated projects.

alcohol, tobacco, cannabis, cocaine and derivatives, opiates, ecstasy

### Search the database

Help with this

### Find projects by country

Belgium  
Bulgaria  
Czech Republic  
Denmark  
Germany  
Estonia  
Greece  
Spain  
France  
Ireland  
Italy  
Cyprus  
Latvia  
Lithuania  
Luxembourg  
Hungary  
Malta  
Netherlands  
Austria  
Poland  
Portugal  
Romania  
Slovenia  
Slovakia  
Finland  
Sweden  
United Kingdom  
Norway  
Turkey

### Related links

[EDDRA quality levels](#)

[EDDRA resources](#)

[Evaluation Instruments Bank \(EIB\)](#)  
A database that contains 170 evaluation instruments in the treatment field and 70 in the prevention field

[Glossary of best practice terms](#)  
Contains definitions for the terms used within EDDRA

Done

start

Microsoft Excel... Inbox for Maric... [Fwd: Re: [Fw... 5 Firefox documentation ... Microsoft Powe... Visit of Mr Mich... EN 15:17

## 3 axes for scoring – 3 quality levels

### 1. **Internal coherence:**

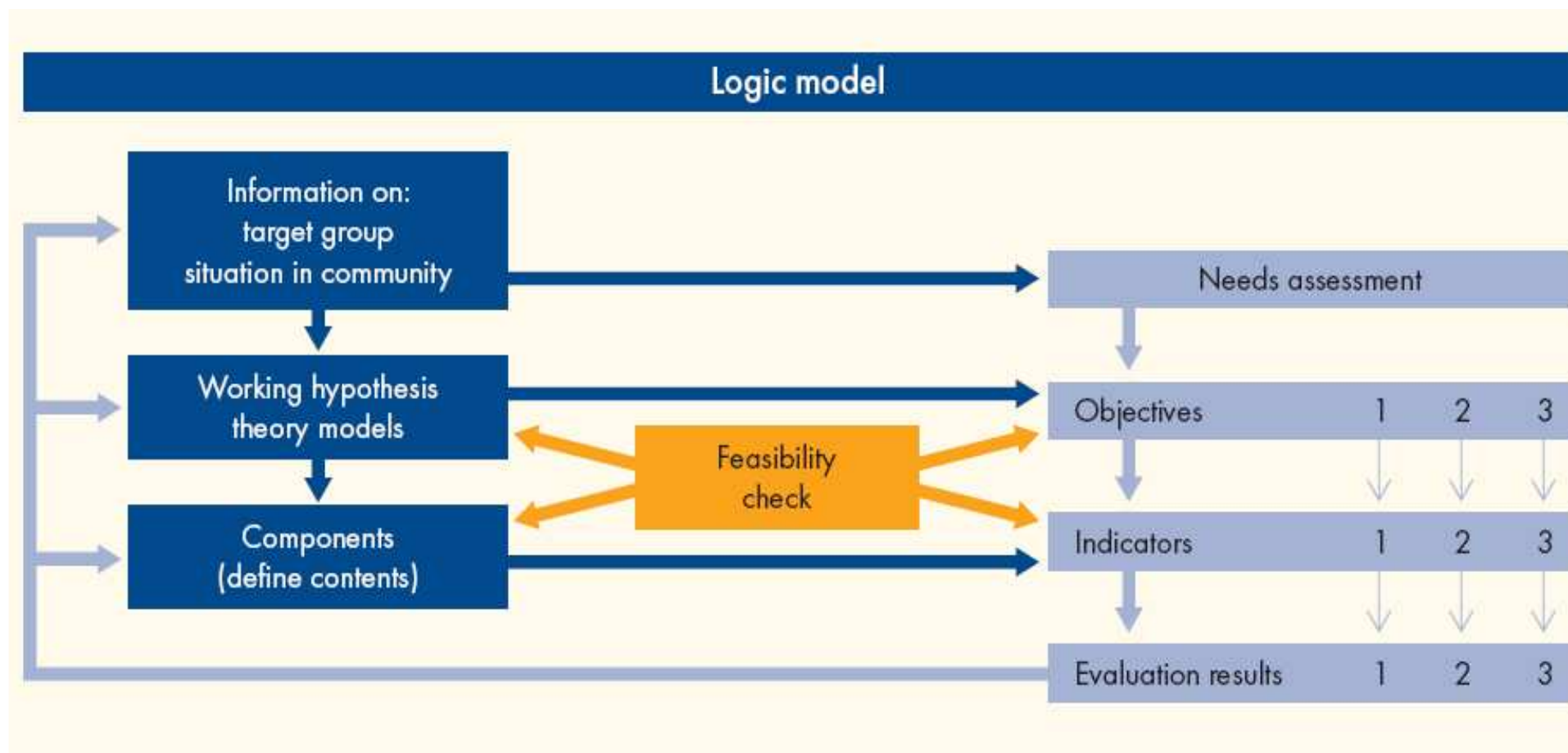
logical, plausible, theory-led?

### 2. Level of **evidence creation** (process evaluation, levels of outcome evaluation)

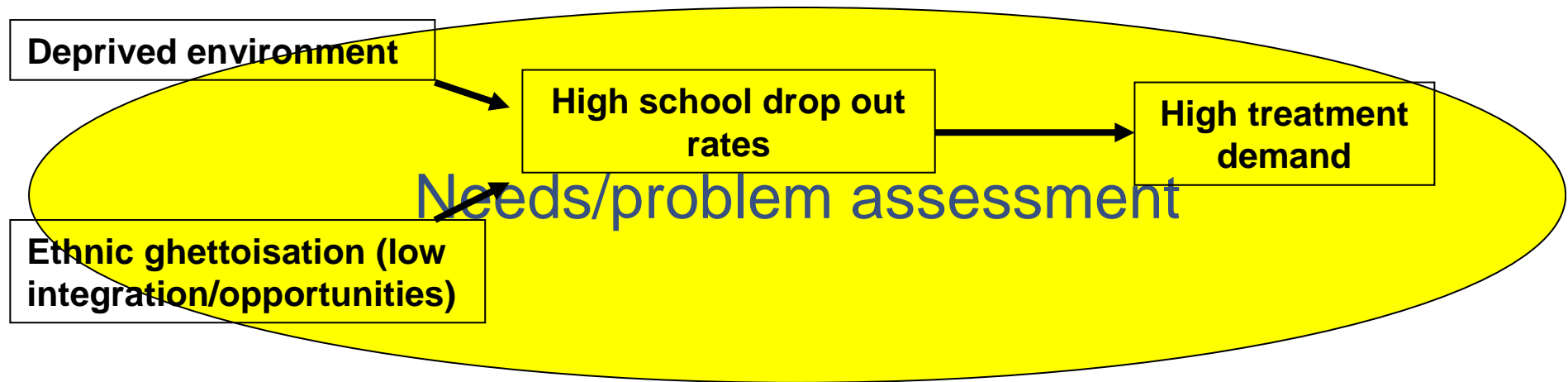
### 3. Additional information and context (Coordination with other services)

- Level I – coherent, plausible, process evaluation
- Level II – the above and: more theory led, with outcome evaluation
- Level III – the above and: Randomised controlled trials or similar





# Modus operandi according to Logic Model



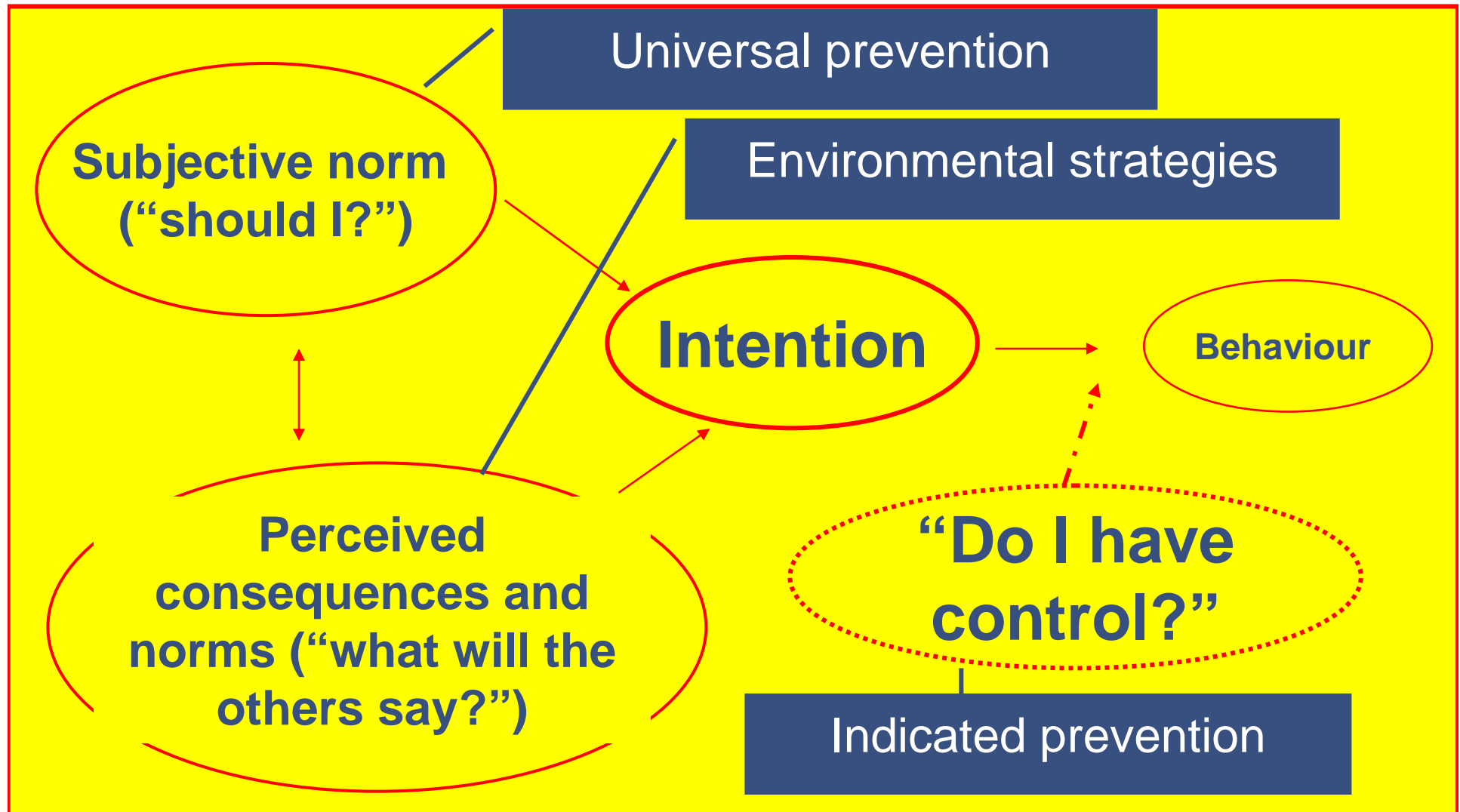
## Social Development (Catalano & Hawkins)

- Focused on high risk environments
- low bonding to conventional institutions (family, school, peers),
- low psychosocial or academic competences
- low reinforcement for positive behaviour (by teachers or parents)
- Leads to integration into deviant groups and drug use.
- Not gender-specific, the sequence is questioned (Flay & Petraitis)





# *Reasoned action theory; Ajzen Fishbein*

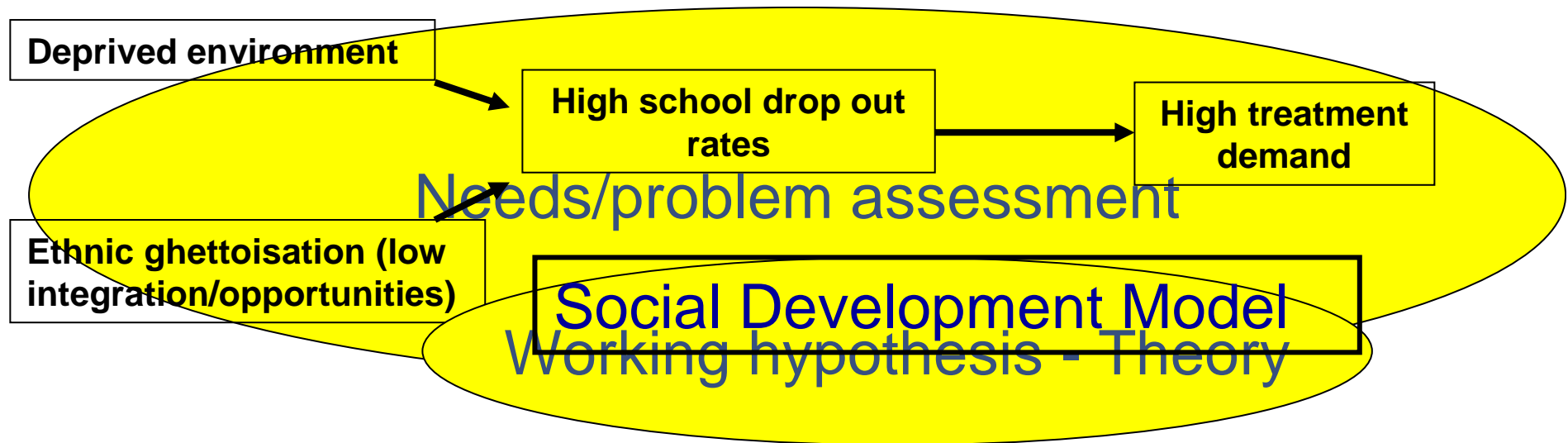


# Theories and working mechanisms

- Theories predict the effects of certain variables and their interaction.
- When proven theories are the basis for defining objectives and strategies, the intervention is 'theory led'.
- Assumptions are then based on published research evidence.
- Identify the causes of the problem, the risk factors and how the problem can be solved.
- Define Objectives: what you want to achieve and in/with whom regarding substance use and mediating variables.



# Modus operandi according to Logic Model



## General Objective

Operationalise into..

## Specific objectives

1. Intermediate goals that contribute to the general objective
2. Ideally quantifiable or measurable
3. Realistic
4. Related to drug use or surrogates (School performance, social skills)
5. Changes in the target group

1. Which behaviour?
2. In whom?
3. When?

**CAVE!!!!** → Operational Objectives:  
Means and outputs needed in order to achieve the specific objectives

## Are these valid specific objectives?

- “Reaching out for more people“
- “Provide information about ... “
- “Provide opportunities to ... “
- “Provide a space for ...”
- “Involve... “
- “Actively sensitising and informing ...”



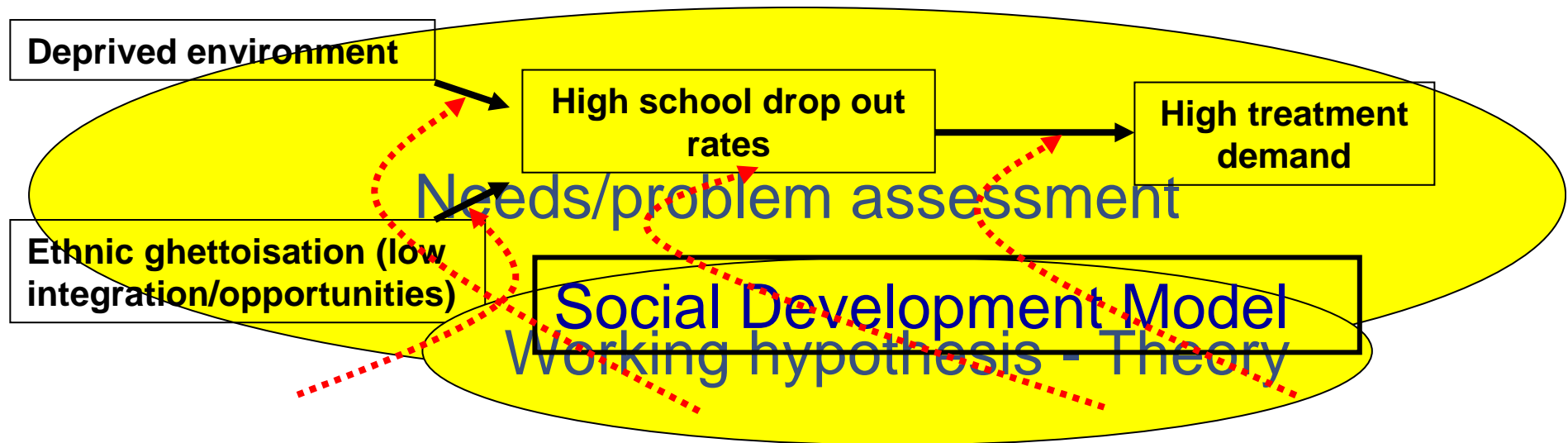


# Essential distinctions

- **Operational Objectives:**
  - Means and outputs needed in order to achieve the specific objectives
- **Specific Objectives**
  - Ideally quantifiable or measurable
  - Changes in the target group:
    - related to drug use or behavioural surrogates
    - ... or status (health, social, economic)



# Modus operandi according to Logic Model



# What seems to work best in schools

- **Social skills** (assertiveness, communication, peer-pressure resistance), personal skills (decision making, coping, goal setting), **Attitudes** (especially normative beliefs) and **Information** (on drugs and consequences of use).
- Interactive delivery (peer group vs. frontal teaching) focussing on social skills
- Intensive (10 sessions, small groups)
- Involve Family (and community)
- Supported by local and school norms on legal drugs

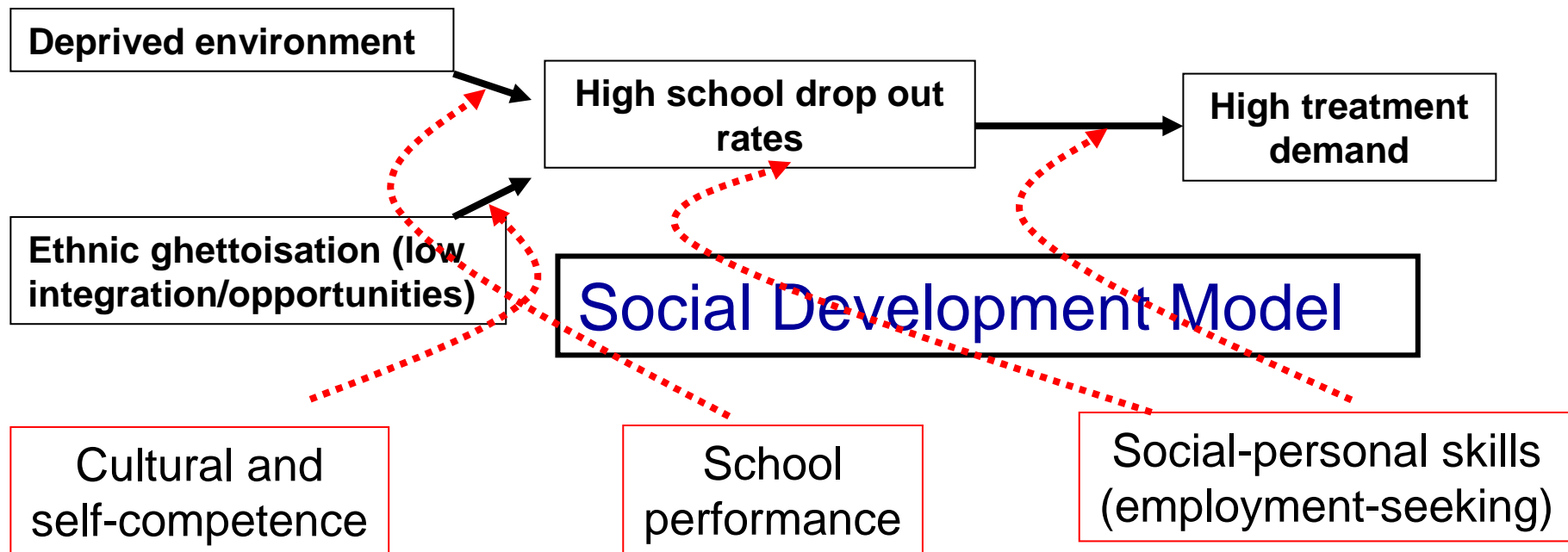


## Normative beliefs

- Correct misperception about acceptance and prevalence of drug use in reference populations
- Unravel cognitive and value discrepancies (smoking  $\Leftrightarrow$  no-global)
- Correct selective perceptions about peer populations – pluralistic ignorance
- Reveal influences of industries, also the “alternative” ones: Rebellion sells well, or: drug use is neither rebellious nor alternative



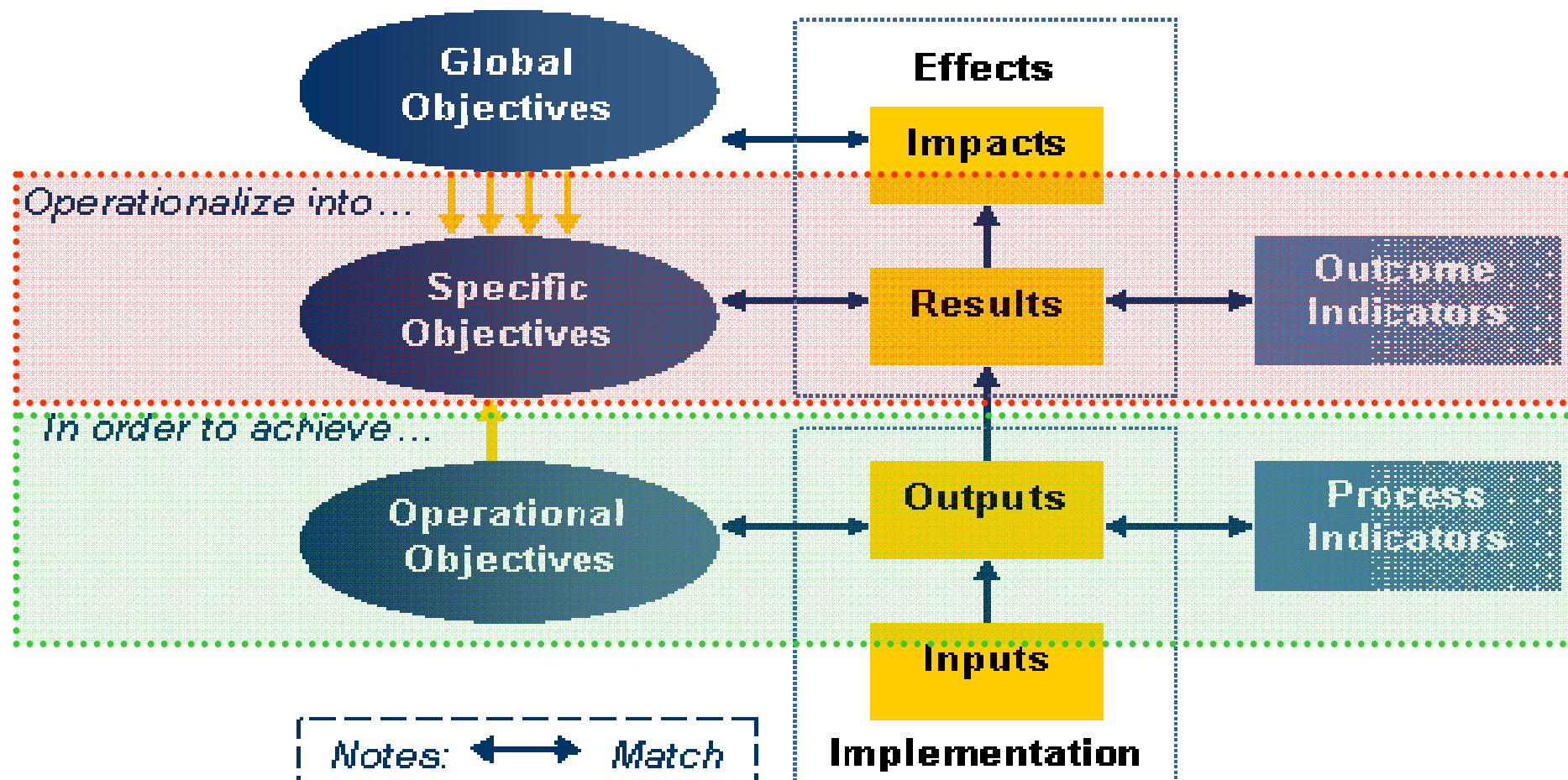
# Modus operandi according to Logic Model



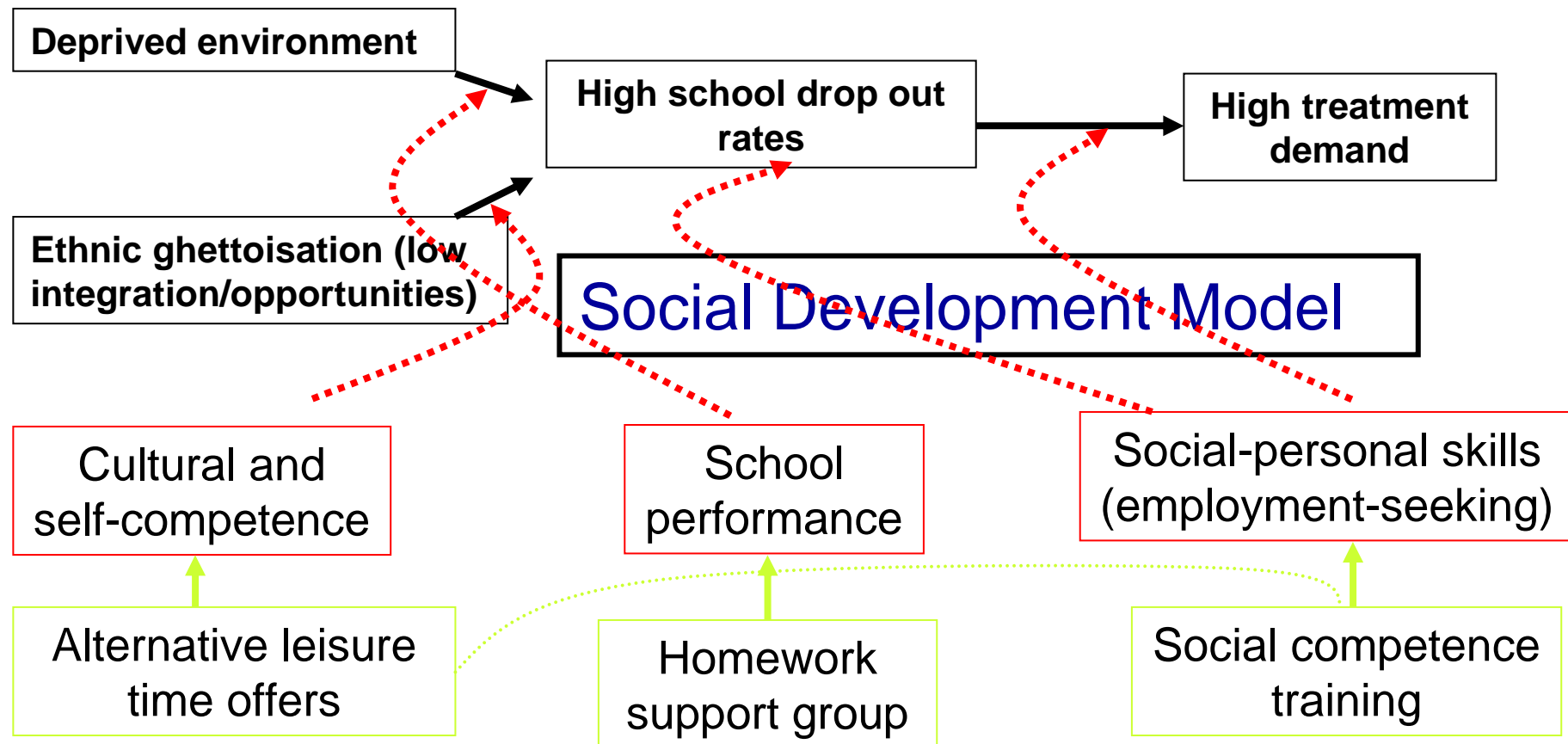


# Outcome vs. process

## Indicators and Objectives



# Modus operandi according to Logic Model



## Evaluation Instruments Bank (EIB)

The Evaluation Instruments Bank (EIB) is an online archive of freely available instruments for evaluating drug-related interventions. Details regarding copyright and/or possible use restrictions are specified for each instrument. Instruments are generally classed according to the intervention field they are designed to be used in (treatment, prevention, or harm reduction), though some instruments may be usable in more than one field.

### Treatment instruments >>

**By aspect:** Needs and planning | Mediating and risk factors | Process | Outcome | Satisfaction

**By target population:** Children | Adolescents | Adults | Special groups and settings

### Prevention instruments >>

**By aspect:** Needs and planning | Mediating and risk factors | Process | Outcome

**By target population:** Children | Adolescents | Adults | Special groups and settings

### Harm reduction instruments >>

[View all instruments](#)

#### Search by title

Enter keyword(s) to search within instrument titles.

### Non-English languages

Most instruments are in English but some instruments are available in other languages.

[Spanish](#) | [Czech](#) | [Danish](#) | [German](#) | [Greek](#) | [French](#) | [Italian](#) | [Lithuanian](#) | [Hungarian](#) | [Dutch](#) | [Polish](#) | [Portuguese](#) | [Romanian](#) | [Slovak](#) | [Slovene](#) | [Swedish](#) | [Norwegian](#) | [Russian](#)

### Specific topics

The keywords below show instruments which focused on a particular topic.

[attitude](#) | [coping](#) | [HIV/AIDS](#) | [interview](#) | [motivation](#) | [satisfaction](#) | [substitution](#)

### What is an evaluation instrument?

An evaluation instrument is typically a questionnaire, an interview script, or a set of observation guidelines, used to evaluate one or more aspects of an intervention in the drugs field. Depending on what is being evaluated, an instrument may be used only once during the intervention, or several times. It may be administered by or to a professional, by or to two a parent/teacher, or directly to the target group.

[Click here to learn more about evaluation and evaluation instruments >>](#)

### Related links

[Examples of evaluated practices: EDDRA](#)

[Prevention and Evaluation Resource Kit: PERK](#)

[EMCDDA publications](#)  
[Guidelines for the evaluation of treatment in the field of problem drug use](#)

[Guidelines for the evaluation of outreach work: a manual for practitioner](#)

[Evaluation: a key tool for improving drug prevention](#)

[Guidelines for the evaluation of drug prevention: a manual](#)

## Habilidades para tomar de decisiones

A continuación figuran varios enunciados relativos a tus puntos de vista sobre el modo de tomar decisiones. Marca la casilla que te parezca correcta en tu caso.

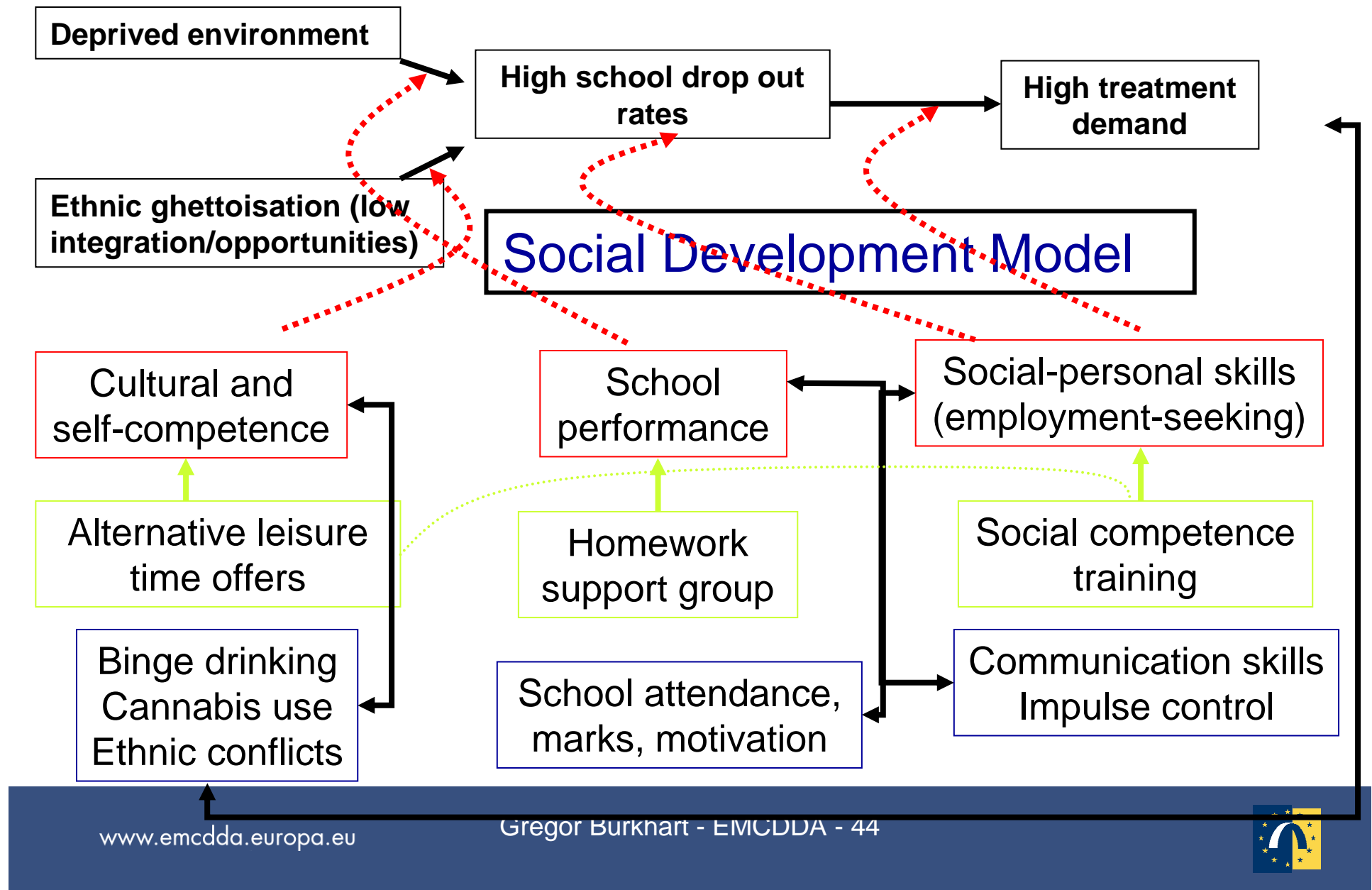
	Totalmente de acuerdo	De acuerdo	Difícil de decir	En desacuerdo	Totalmente en desacuerdo
a) Cuando he decidido hacer algo, siempre lo llevo a cabo	[ ]	[ ]	[ ]	[ ]	[ ]
b) Rara vez tomo decisiones sin pensar en las consecuencias	[ ]	[ ]	[ ]	[ ]	[ ]
c) Algunas veces, decido algo “según me viene a la cabeza”	[ ]	[ ]	[ ]	[ ]	[ ]
d) Sopeso todas las opciones antes de decidirme a algo	[ ]	[ ]	[ ]	[ ]	[ ]
e) Rara vez decido hacer algo de lo que después me arrepiento	[ ]	[ ]	[ ]	[ ]	[ ]
f) Cuando tengo una idea, a veces tomo una decisión sin pensar	[ ]	[ ]	[ ]	[ ]	[ ]
g) A veces cambio mi decisión sobre algo varias veces al día	[ ]	[ ]	[ ]	[ ]	[ ]
h) Cuando decido algo, no importa lo que piensen mis amigos	[ ]	[ ]	[ ]	[ ]	[ ]

### Cálculo de Índices:

Cada respuesta se puntúa de 5 = “Totalmente de acuerdo” a 1 = “Totalmente en desacuerdo”. Invierta las puntuaciones correspondientes a los ítems (c), (f) y (g), es decir, puntúe estos ítems de 1 a 5. La media de las puntuaciones proporcionará una medida de la habilidad personal para la toma de decisiones basada en criterios racionales. Cuanto más alta sea la puntuación obtenida, más capacidad de toma de decisiones racional mostrará el sujeto o sujetos encuestados.

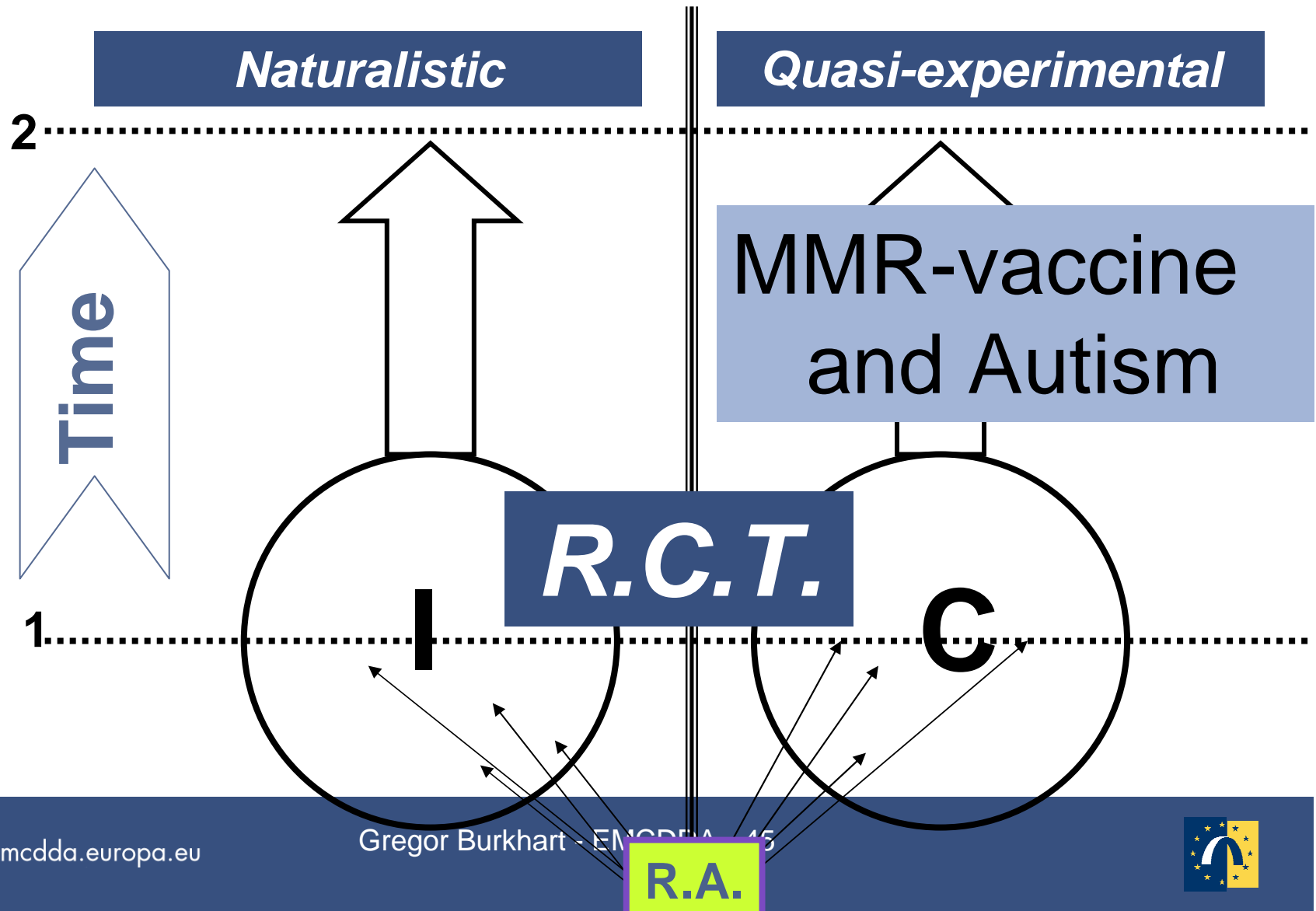
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# Modus operandi according to Logic Model





# Evaluation Designs



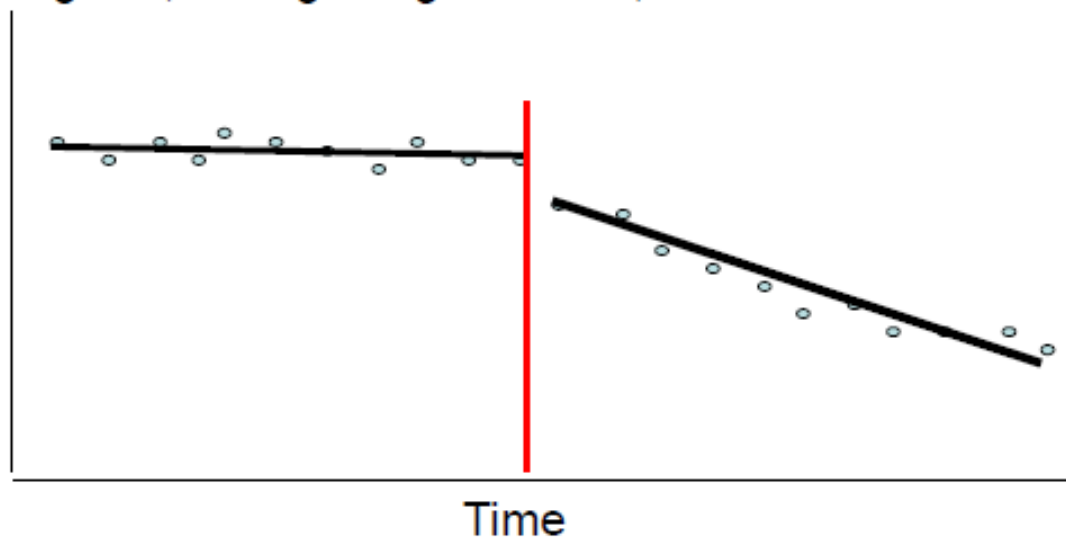
# Alternatives to RCTs: interrupted time series

Observe some measure at regular intervals over time

Note there is one observation per time point

At some point an interruption occurs

- New program, change in guidelines, intervention



# Several possible forms of Best Practice

- Establish evidence of efficacy directly from the intervention
- → outcome evaluation
- sound evaluation design, especially for outcome
- Effect size measures
- → Logic Model

- Prove that this intervention is in line with existing evidence
- → process evaluation
- proper implementation and design of the intervention
- sound theory base
- → Logic Model



# Several possible forms of Good Practice

- Prove that your intervention is in line with existing evidence

## ➔ Process evaluation

- Sound intervention design and
- proper implementation

### **PROCESS:**

***“...well done?”***

- Establish evidence directly from your intervention

## ➔ outcome evaluation

- sound evaluation design and indicators
- Effect size measures

### **OUTCOME:**

***“... effective?”***



## Why?

- Using a Logic Model facilitates entering into EDDRA
- Logic Models facilitate comparability
- Not only effectiveness: context, benefit for targets → Evidence in practice
- Exchange practice, make experiences reproducible
- Standardisation: to allow also a common professional to perform reasonably well. Not only the charismatic inventor of an approach

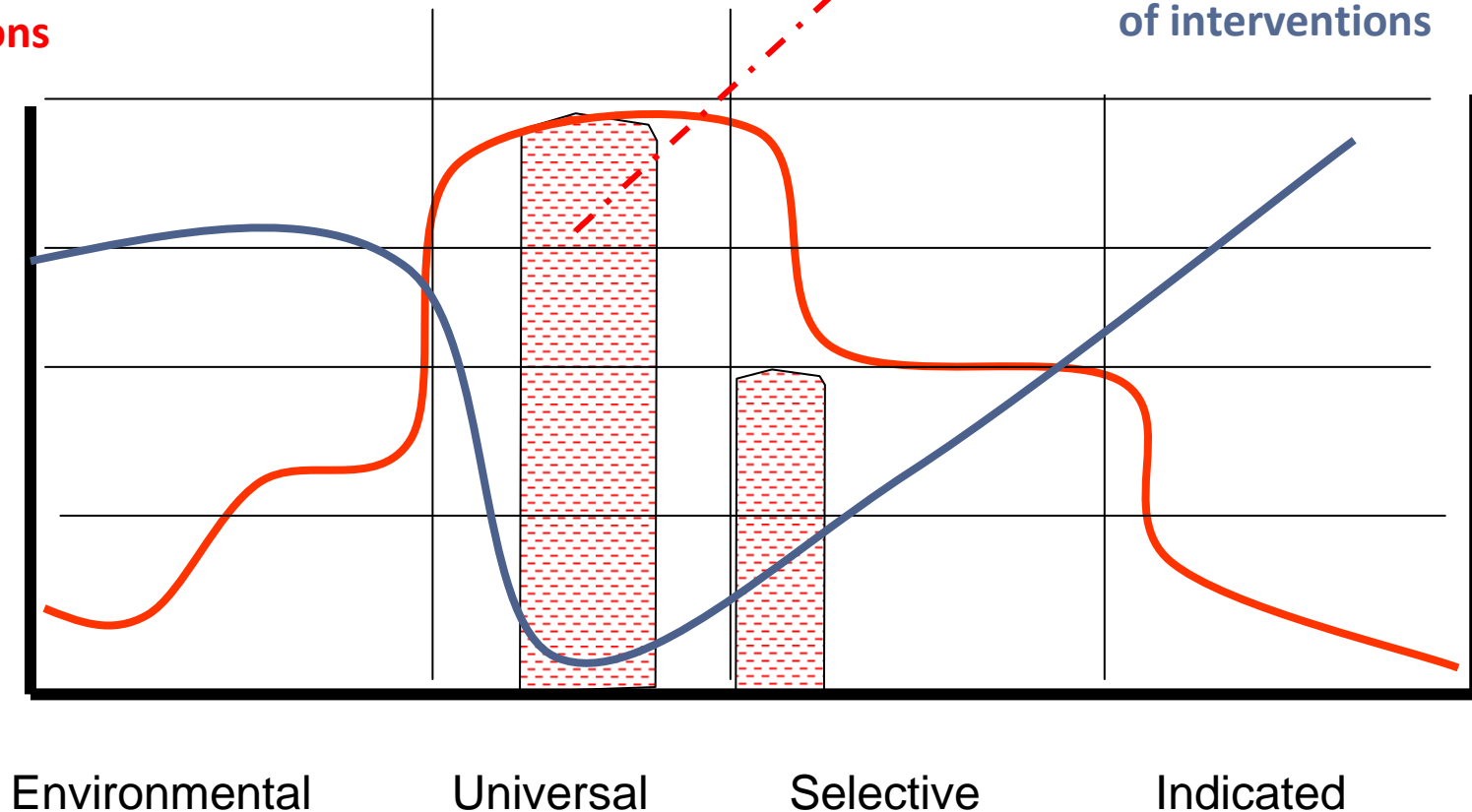


# Availability and expectable effects of interventions

Availability  
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Information  
provision

Effects  
of interventions





For more information and questions ...

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