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In collaboration with:

PRESIDENZA DEL CONSIGLIO DEI MINISTRI
Ministro per la Cooperazione Internazionale e l'Integrazione
Dipartimento Politiche Antidroga

Prevention Strategy and Policy Makers

"A solidarity consortium"

Rome 9th –10th October, 2012

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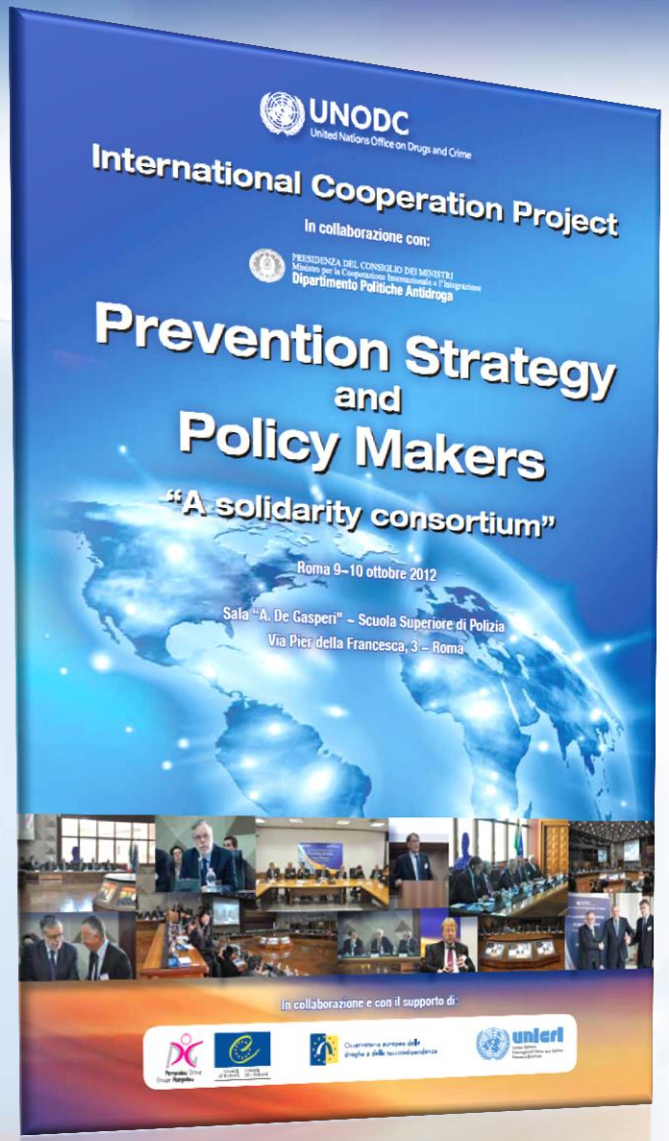
Prevention Strategy and Policy Makers



UNODC
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Prevention Strategy and Policy Makers

PRESIDENZA DEL CONSIGLIO DEI MINISTRI
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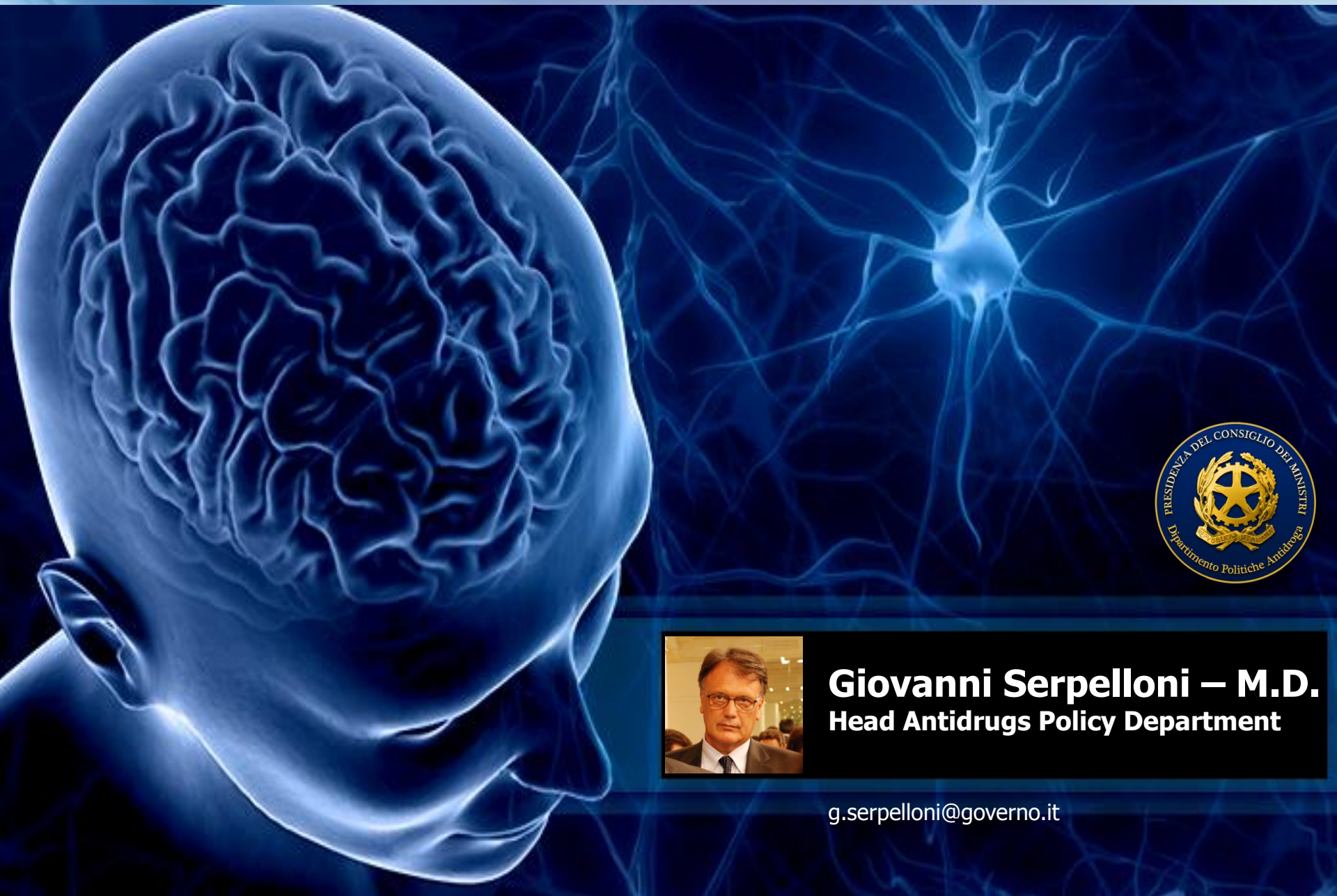


Giovanni Serpelloni – M.D.
Head Antidrugs Policy Department

g.serpelloni@governo.it

The main point is:

Prevention

of the use of all substance abuse and the onset of use

Prevention Strategy and Policy Makers

DRUG USE produce man differnt type of risk

There are different risks from different drugs and different patterns of use……

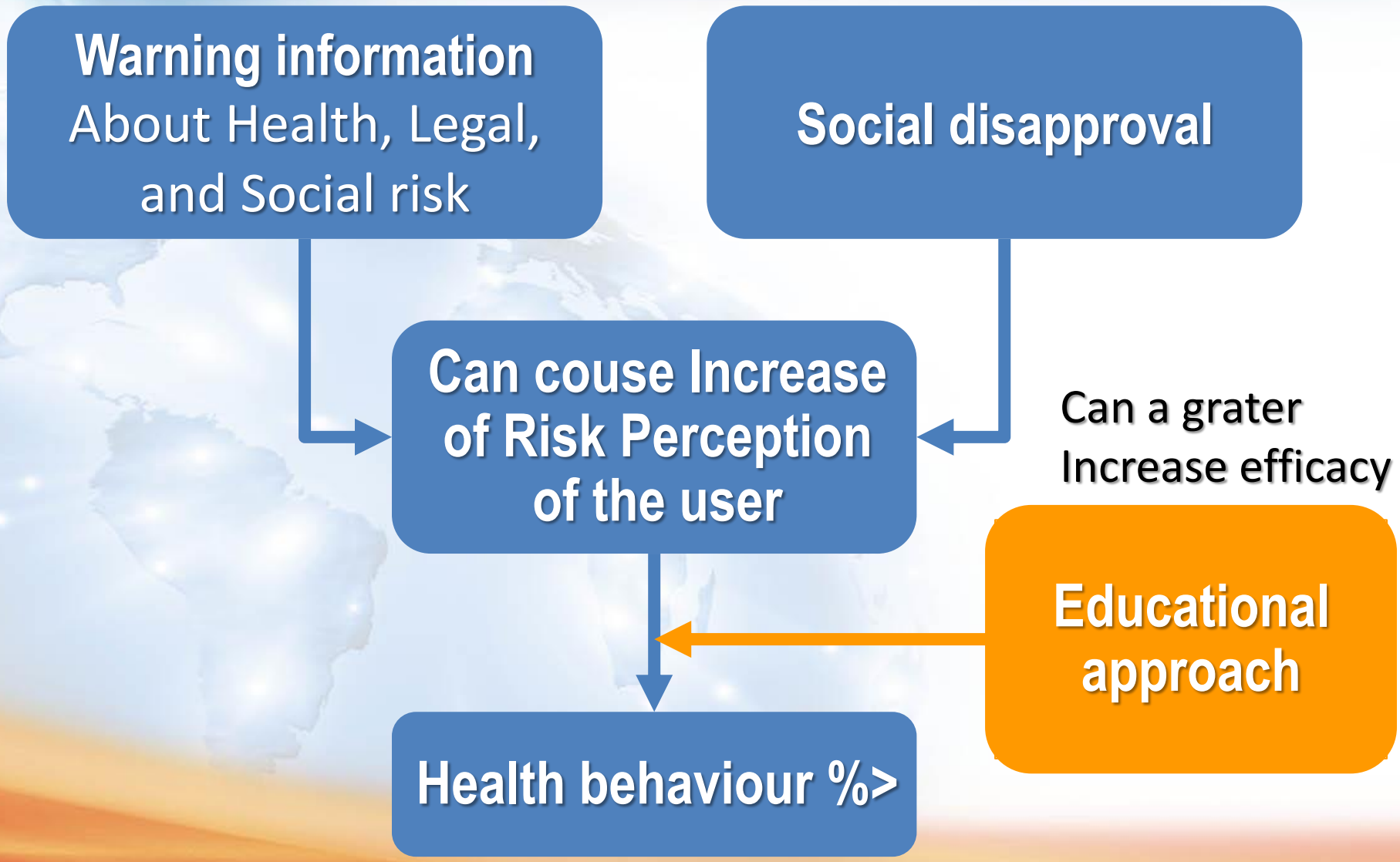
BUT:

All drugs, in young people, have important neuro cognitive conseguences and on the brain maturation

A simple question: Is effectiveness the «warning» information about the risk and the harm of drug use?

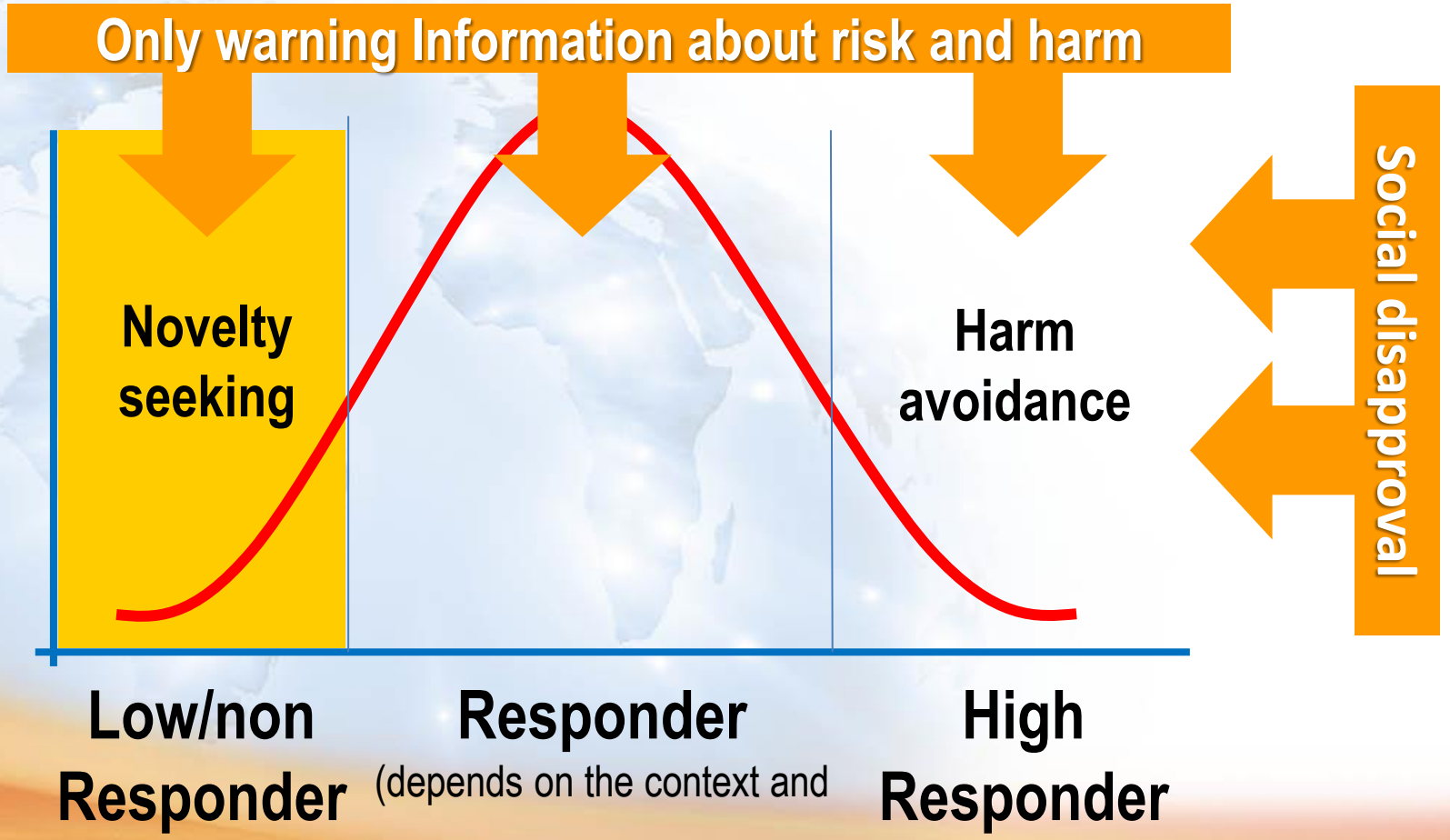
- Only **if** this information can increase **«risk perception»** (evidence based)
- Warning information can modifyed the risk perception and the risk behaviour of the majority of people
- Ut we must remember that Information associated with **educational intervention** is more effective than only information
- It is wrong not to inform about risk and harm of drug use but not all people respond likewise

Risk perception and health behaviour



But there are different responses to warning information and social disapproval in people

Some adolescents, infact, are more resistent than others to behaviour change



Different reactions to preventive information

- **Novelty seeking**: informatinon on risk and harm → possible no change or increase of risk behaviour

- **Harm avoidance**: information on risk and harm → decrease risk behaviour, increase resilence

It is necessary to have a strong differentiation of interventions

Mann, T., Sherman, D., & Updegraff, J. (2004). Dispositional motivations and message framing: A test of the congruency hypothesis in college students. *Health Psychology, 23,* 330–334. doi:10.1037/0278-6133.23.3.330


Psychology of Addictive Behaviors

Decisions During Negatively-Framed Messages Yield Smaller Risk-Aversion-Related Brain Activation in Substance-Dependent Individuals

Rena Fukunaga, Tim Bogg, Peter R. Finn, and Joshua W. Brown

Online First Publication, November 12, 2012. doi: 10.1037/a0030633

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Dispositional Motivations and Message Framing: A Test of the Congruency Hypothesis in College Students

Traci Mann, David Sherman, and John Updegraff

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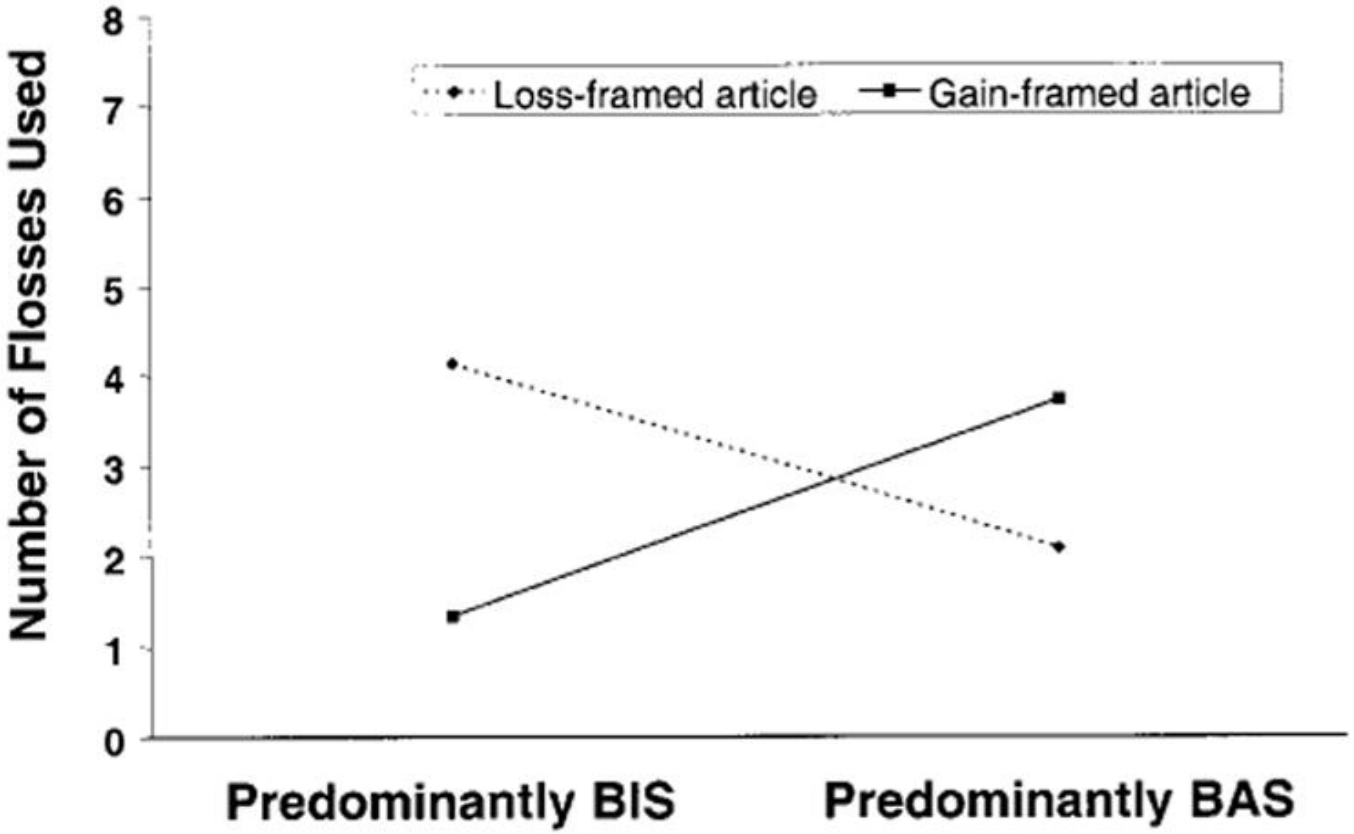
Abstract

Go to:

The authors examined the congruency hypothesis that health messages framed to be concordant with dispositional motivations will be most effective in promoting health behaviors. Undergraduate students ($N = 63$) completed a measure of approach/avoidance orientation (behavioral activation/inhibition system) and read a gain- or loss-framed message promoting flossing. Results support the congruency hypothesis: When given a loss-framed message, avoidance-oriented people reported flossing more than approach-oriented people, and when given a gain-framed message, approach-oriented people reported flossing more than avoidance-oriented people. Discussion centers on implications for health interventions and the route by which dispositional motivations affect health behaviors through message framing.

Figure 1



The effect of message framing and motivational orientation on self-reported flossing. Regression lines were plotted by entering points at +1 *SD* and −1 *SL* from the sample mean of the continuous measure of behavioral inhibition system (BIS) minus behavioral activation system (BAS) and plotting *y*-axis points accordingly.

Psychology of Addictive Behaviors

0893-164X/12/$12.00 DOI: 10.1037/a0030633

Decisions During Negatively-Framed Messages Yield Smaller Risk-Aversion-Related Brain Activation in Substance-Dependent Individuals

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CITATION

Fukunaga, R., Bogg, T., Finn, P. R., & Brown, J. W. (2012, November 12). Decisions During Negatively-Framed Messages Yield Smaller Risk-Aversion-Related Brain Activation in Substance-Dependent Individuals. *Psychology of Addictive Behaviors. Advance online publication.* doi: 10.1037/a0030633

- Questo studio presenta prove che dimostrano gli effetti differenziali di messaggi informativi sul rischio correlato attivazione tra SD e non-SD gruppi. Una possibile implicazione dei nostri risultati è nella contesto della salute campagne mediatiche sulla base di ricorsi negativi (Mann et al., 2004), cioè che evidenziando la conseguenza negativa di comportamenti a rischio possono non essere altrettanto efficace nella sostanza utenti, in particolare a livello neurale. In particolare, abbiamo trovato negativo messaggi ad essere meno efficace nel rafforzare avoidancerelated attività cerebrale in SDS rispetto al non-SDS (ad esempio, la Figura 4B), che è coerente con l'ipotesi generalizzata insensibilità ingresso (H1). Tuttavia, siamo cautamente sottolineare che i nostri risultati non non suggeriscono messaggi positivi determinerà un aumento dei rischi aversionrelated l'attività del cervello, messaggi positivi non differiscono nella loro efficacia tra i due gruppi, sia comportamentale o al livello neurale. Le prove per la nostra seconda ipotesi, il indebolita cervello-comportamento associazione ipotesi (H2), era molto più limitato in confronto con le prove per H1. Più in generale, il conclusioni a sostegno dell'ipotesi generalizzata insensibilità di ingresso sono coerenti con un modello di espressione fenotipica che individui spettacoli con esternalizzazione psicopatologia (tra cui dipendenza da sostanze) tendono ad avere una ridotta capacità cognitiva una varietà di forme, tra cui l'intelligenza, memoria a breve termine (STM), e la memoria di lavoro (Bogg & Finn 2010; Endres, Rickert, Bogg, Lucas, e Finn, 2011; Finn et al, 2009).. I risultati suggeriscono generalizzata sensibilità del segnale ridotto al informativo ingressi potrebbe essere un collegamento neurale che può aiutare a spiegare osservato modelli di covarying ridotta capacità cognitive e esternalizzazione psicopatologia.
  A nostra conoscenza, questo è il primo studio fMRI di confrontare SD e non SD gruppi in un compito comportamento di scelta che mostra come informativa messaggi di interagire con l'elaborazione di rischio. Questo studio ha effetti differenziali neurali visualizzati dei messaggi informativi sul riskrelated attivazione nelle regioni ACC e INS, quando si confrontano il gruppo SD alla non-SD gruppo in un compito comportamento di scelta. Il nostro risultati di identificare i deficit candidati neurali nel trattamento dei persuasiva messaggi contro i comportamenti a rischio in una sostanza-dipendente gruppo.

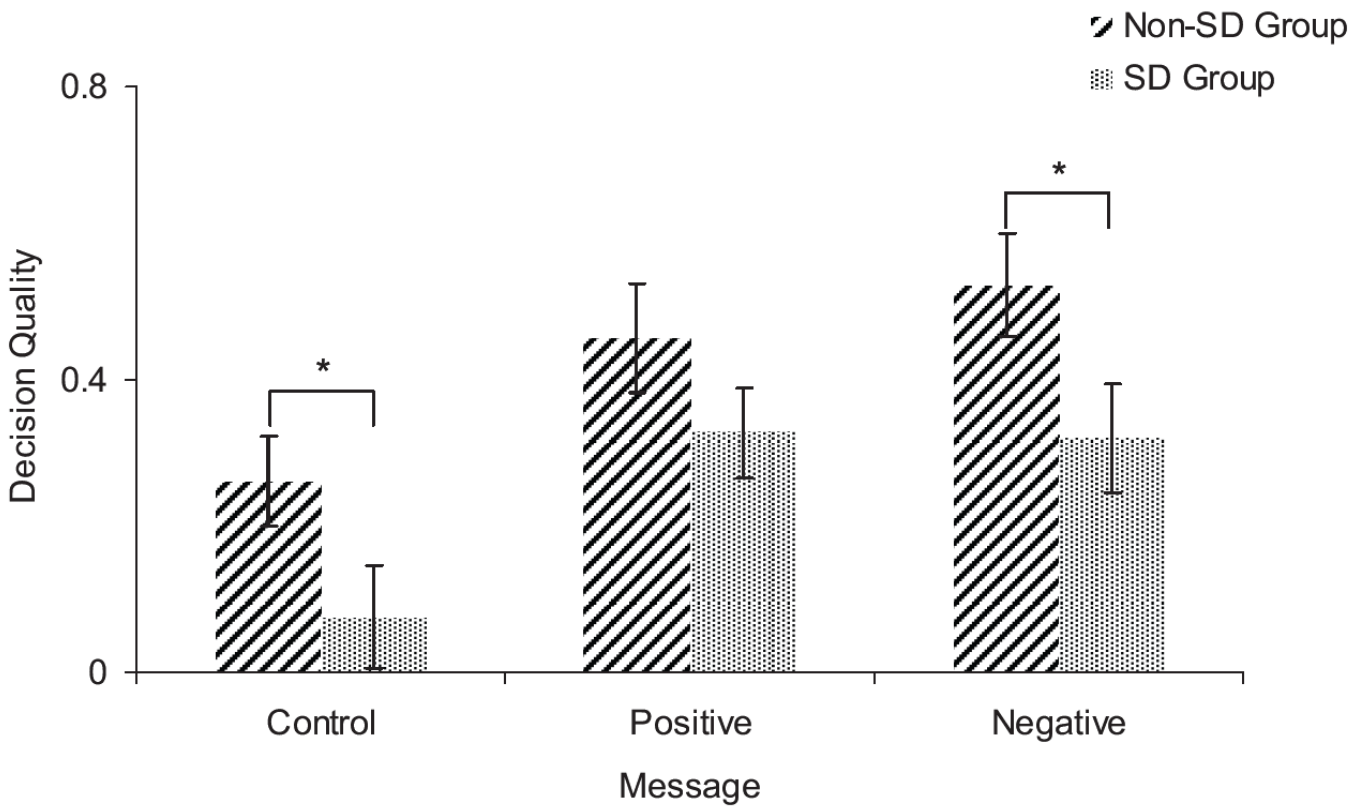
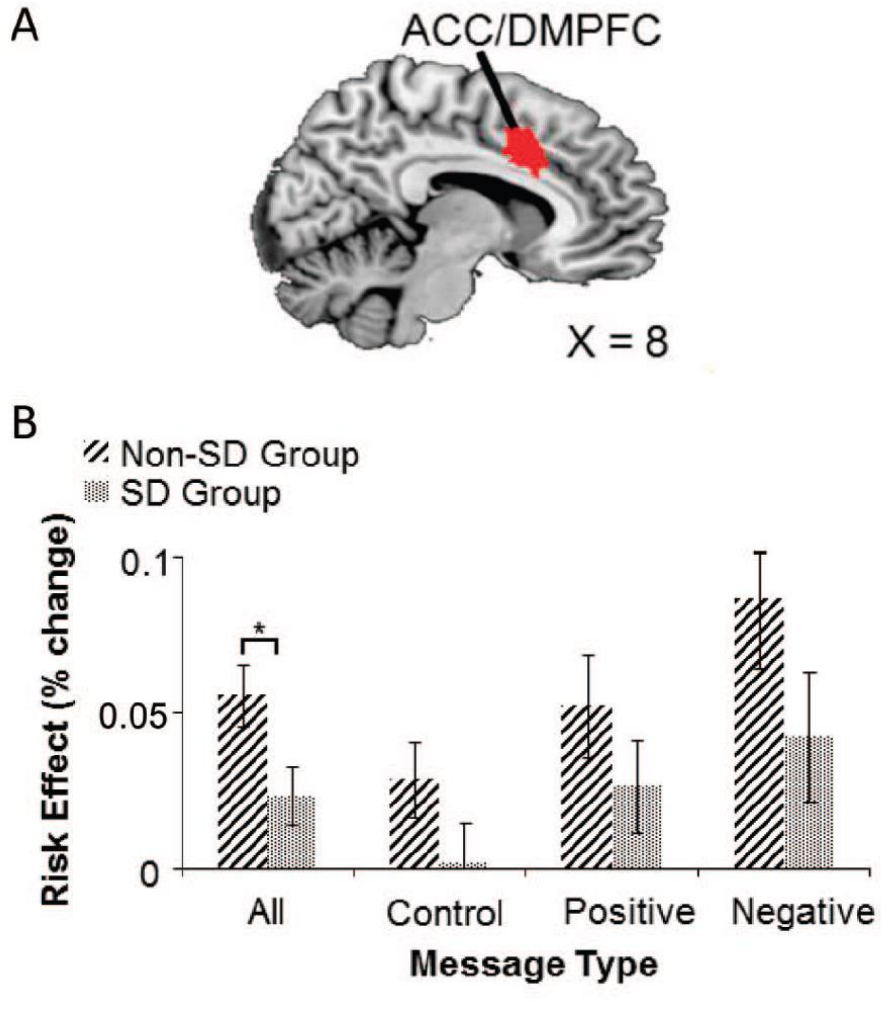


Figure 2. Group differences in decision quality (DQ). Scores differed significantly between groups for the negatively-framed message and the control message. There also was a trend toward poorer performance in the positively-framed message in the SD group compared with the non-SD group. Error bars indicate within-subject standard error of the mean (SEM) data (Loftus & Masson, 1994).



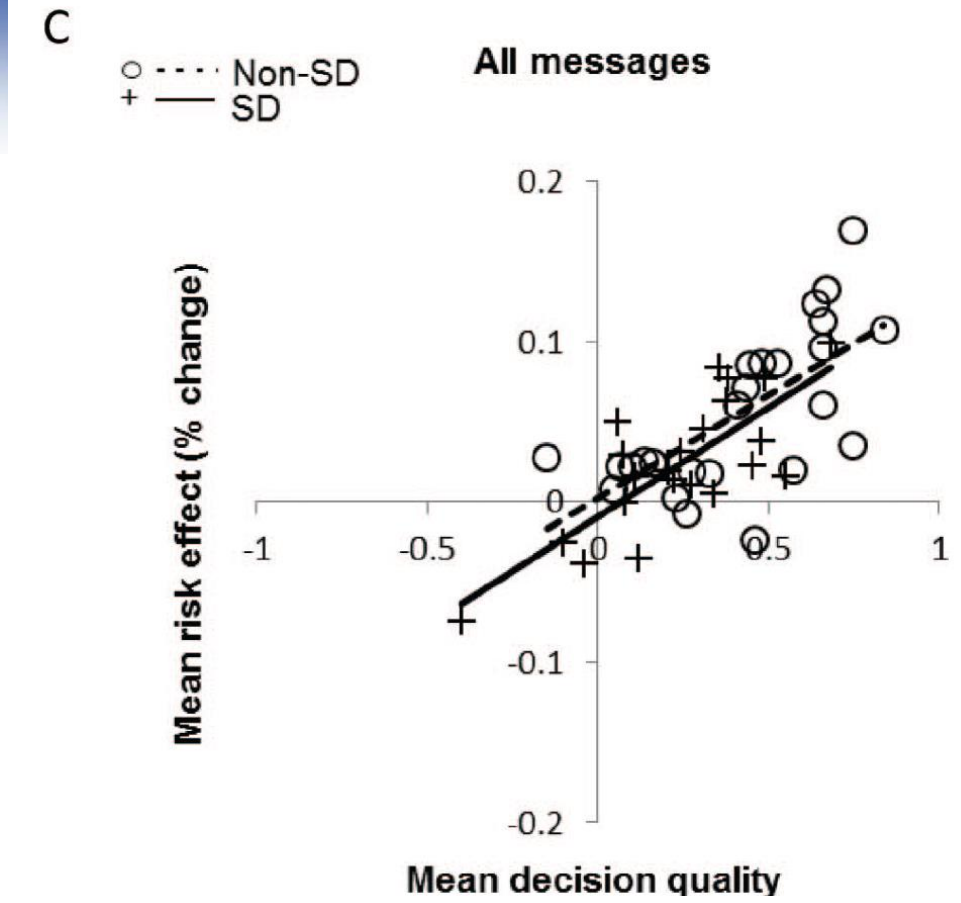


Figure 3. Behaviorally-relevant neural risk effect averaging across all messages in ACC and DMPFC. (A) Shown in red is a region of the right ACC/DMPFC (BA 24/32, peak voxel: MNI 2, 20, 34), where averaging across messages, there is a correlation between decision quality (DQ) and the risk effect. Sagittal section of the human brain (MNI x = 8). (B) Within the region shown in A (using voxels that passed at $p < 0.05$, FDR), follow-up ROI analysis found risk-aversion-related brain activity to be significantly lower in the SD group when averaged across messages. (C) The correlation of DQ and the risk effect averaged across messages. For panel C, each point represents a participant from either the non-SD or SD group and the solid/dotted lines show the best-fit linear regressions by group.

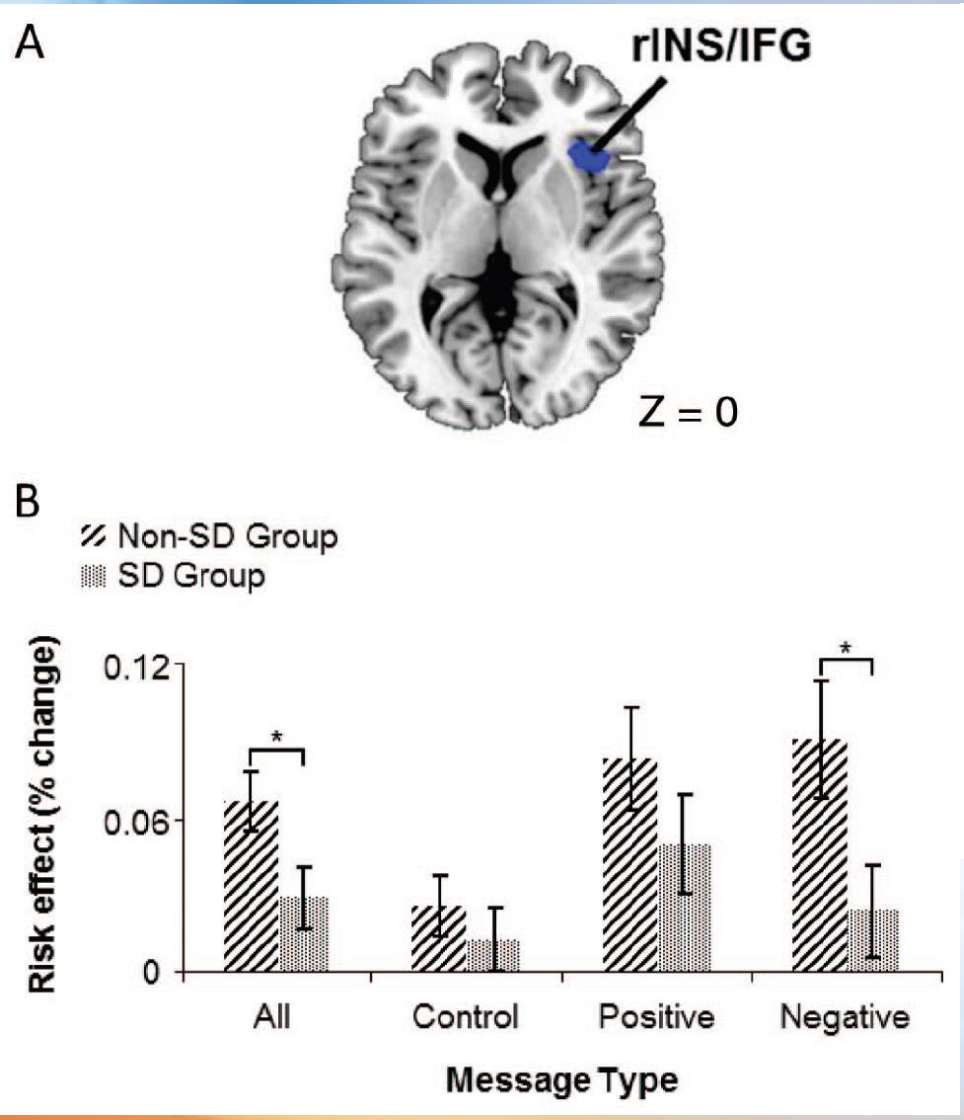
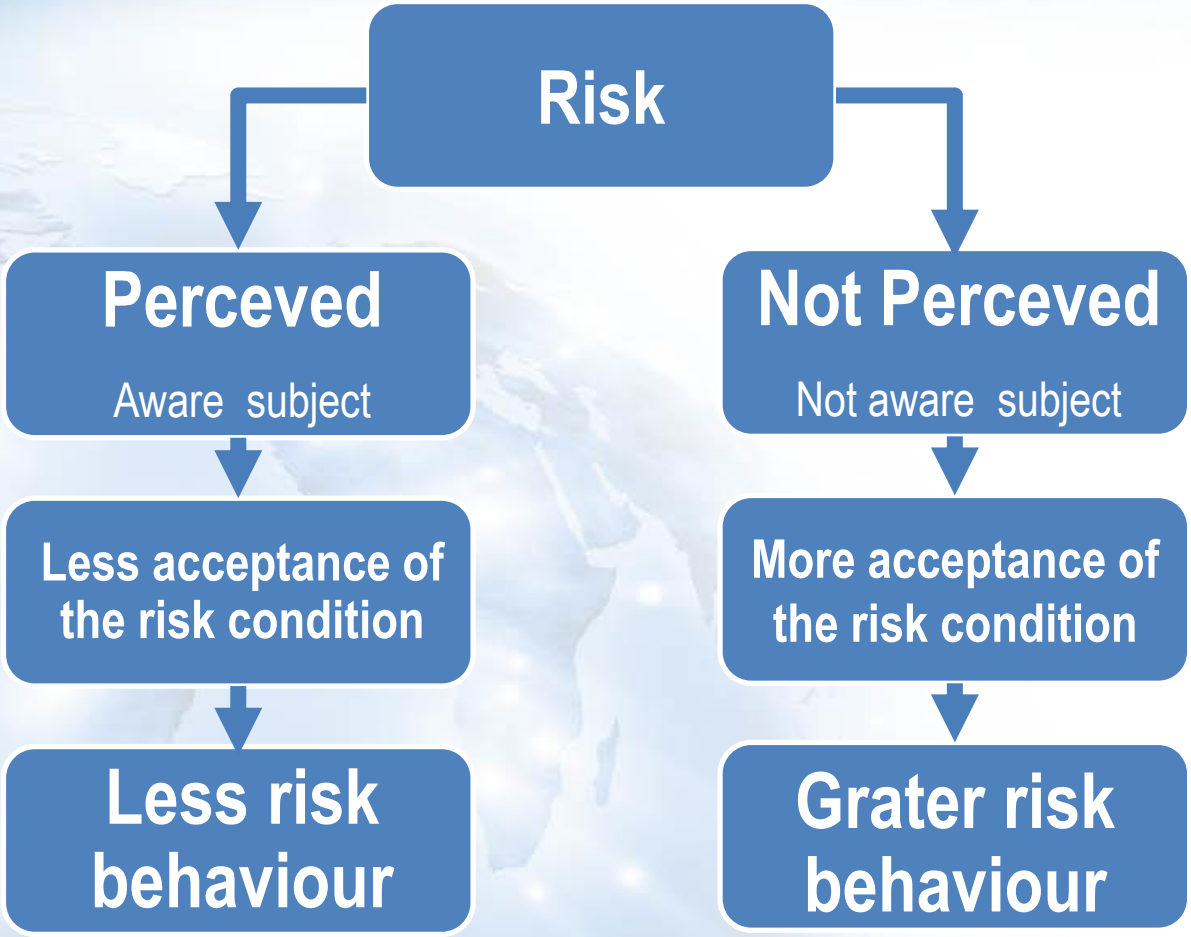


Figure 4. Behaviorally-relevant neural risk effect averaging across all messages in right INS and IFG. (A) Shown in blue is a region of the right INS/IFG (BA 47, peak voxel: MNI 38, 22, 0), where averaging across messages, there is a correlation between decision quality (DQ) and the risk effect. Transverse section of the human brain (MNI z = 0). (B) Within the region shown in A (using voxels that passed at $p < 0.05$, FDR), follow-up ROI analysis found risk-aversion-related brain activity to be significantly lower in the SD group for the negatively-framed message and when averaged across messages. (C) The correlation of DQ and the risk effect with the negative message. For panel C, each point represents a participant from either the non-SD or SD group and the solid/dotted lines show the best-fit linear regressions by group.

G. Serpelloni 2012

Adolescents and risk

(A. Tymula, Center for neural science, Yales School of Mdicine, NYU, 2012)



True in the majority percentage of young people

There exists differences in behaviour according to temperament and character (inversion of the reaction)

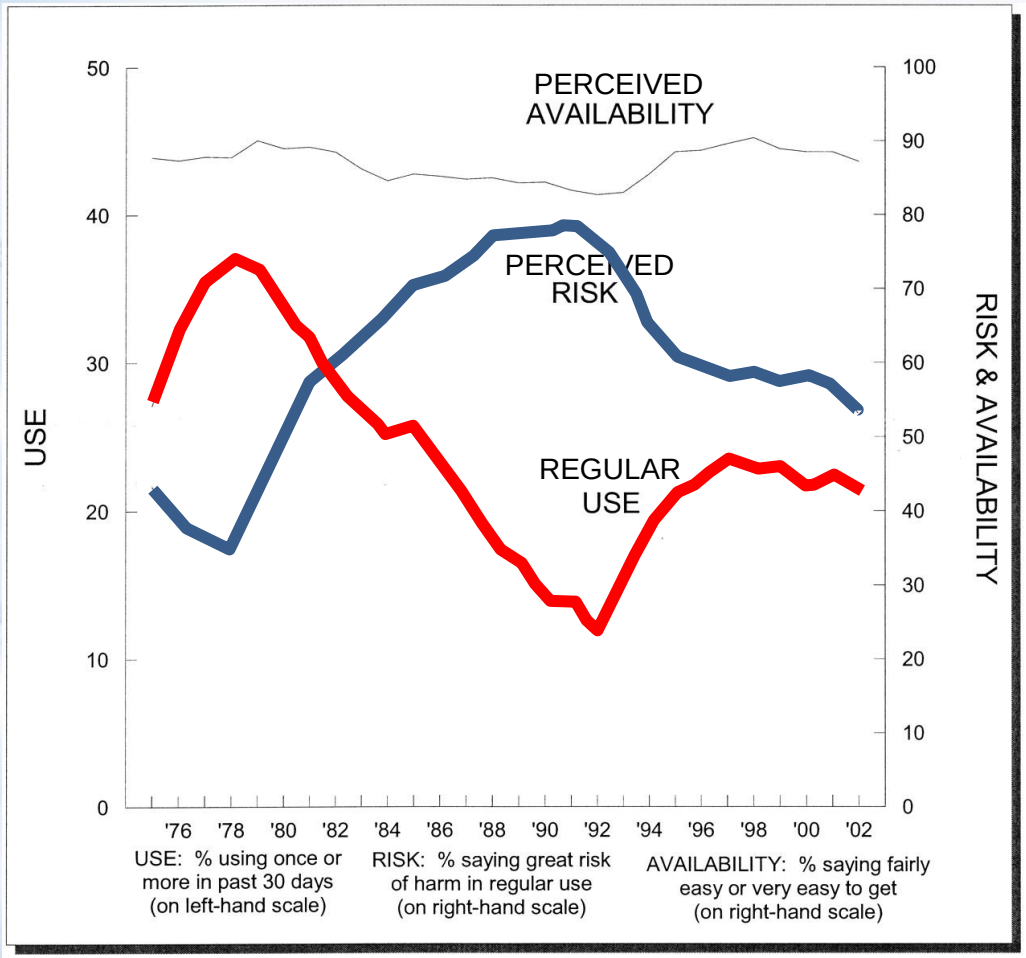
Adolescents and risk

(A. Tymula, Center for neural science, Yales School of Medicine, NYU, 2012)

«Giving adolescents statistical information about dangerous behaviour or training that allows them to properly understand the risks, that may be effective in developing preventive behaviour»

…This is a important statement that we must remeber.

Marijuana: trends in perceived availability, perceived risk of regular use, and prevalence of use in past 30 days for 12th graders.



Source: Johnston LD, O'Malley PM, Bachman JG. Monitoring the Future: National Survey Results on Drug Use, 1975-2002. Vol I: Secondary School Students. Bethesda, MD: National Institute on Drug Abuse; 2003

Joffe A , Yancy W S Pediatrics 2004;113:e632-e638

Different type of drug problem communication (Universal prevention)

1	Good information	Increase risk perception, awareness and health beahviour (evidence based)
2	«Bad» information	Decrease risk perception, awareness and increase risk behaviour
3	The Silence of the «right people»	Serious Mistake: Leave the stage to misinformation «pro drug use». Silence means: being omissive
4	Censorship of the good information	Decrease risk perception and social disapproval Promote the use of drug and their conseguences

The Silence of the «right people»

I wuold like to remaind you of famous statemet
Made by MLK

"Maybe you are not responsible for the situation you are living in, but you'll become responsible if you don't do anything to change it!"

M.L.K.

Another important prevention factor: Social Disapproval and marijuana use

Researh supported by

NIDA NATIONAL INSTITUTE ON DRUG ABUSE
The Science of Drug Abuse & Addiction

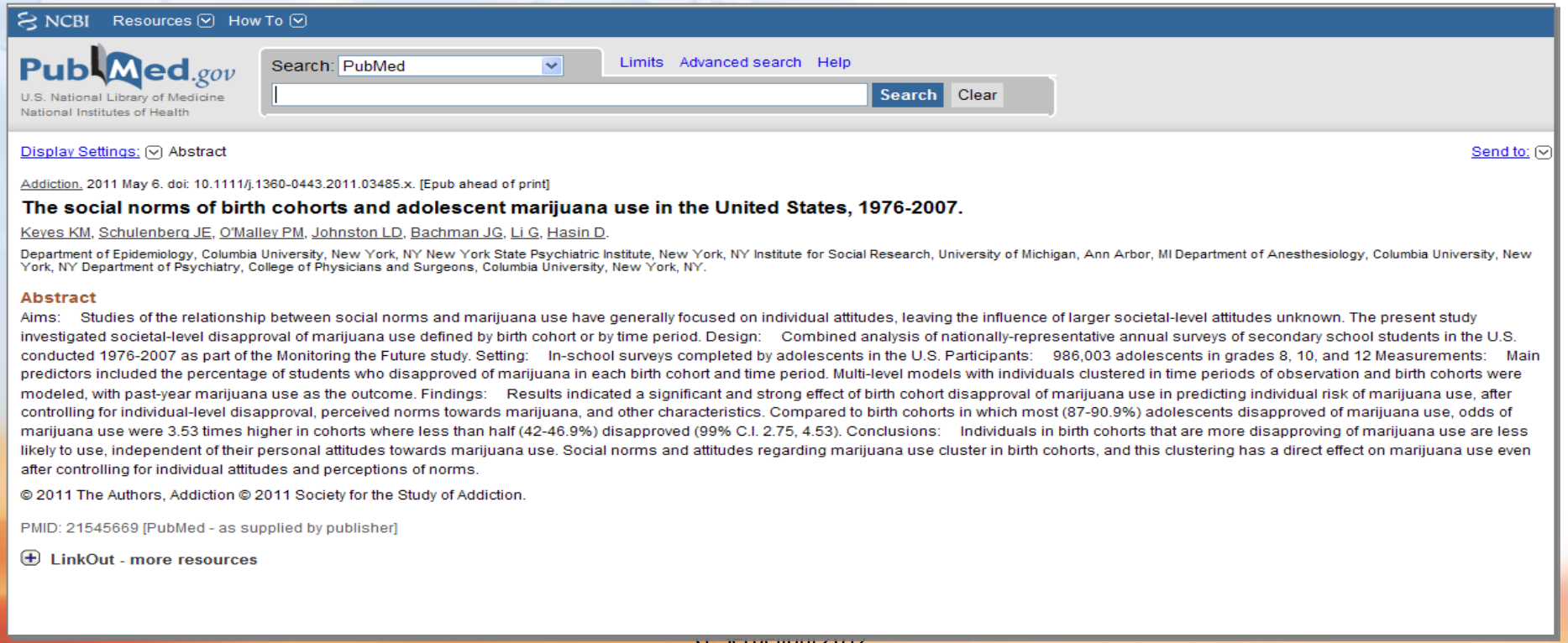
NIAAA National Institute on Alcohol Abuse and Alcoholism
of the NATIONAL INSTITUTES OF HEALTH

New York State Psychiatric Institute

Keyes KM, Schulenberg JE, O'Malley PM, Johnston LD, Bachman JG, Li G, Hasin D.

The social norms of birth cohorts and adolescent marijuana use in the United States, 1976-2007.

Addiction. 2011 May 6.



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Addiction. 2011 May 6. doi: 10.1111/j.1360-0443.2011.03485.x. [Epub ahead of print]

The social norms of birth cohorts and adolescent marijuana use in the United States, 1976-2007.

Keyes KM, Schulenberg JE, O'Malley PM, Johnston LD, Bachman JG, Li G, Hasin D.

Department of Epidemiology, Columbia University, New York, NY New York State Psychiatric Institute, New York, NY Institute for Social Research, University of Michigan, Ann Arbor, MI Department of Anesthesiology, Columbia University, New York, NY Department of Psychiatry, College of Physicians and Surgeons, Columbia University, New York, NY.

Abstract

Aims: Studies of the relationship between social norms and marijuana use have generally focused on individual attitudes, leaving the influence of larger societal-level attitudes unknown. The present study investigated societal-level disapproval of marijuana use defined by birth cohort or by time period. Design: Combined analysis of nationally-representative annual surveys of secondary school students in the U.S. conducted 1976-2007 as part of the Monitoring the Future study. Setting: In-school surveys completed by adolescents in the U.S. Participants: 986,003 adolescents in grades 8, 10, and 12 Measurements: Main predictors included the percentage of students who disapproved of marijuana in each birth cohort and time period. Multi-level models with individuals clustered in time periods of observation and birth cohorts were modeled, with past-year marijuana use as the outcome. Findings: Results indicated a significant and strong effect of birth cohort disapproval of marijuana use in predicting individual risk of marijuana use, after controlling for individual-level disapproval, perceived norms towards marijuana, and other characteristics. Compared to birth cohorts in which most (87-90.9%) adolescents disapproved of marijuana use, odds of marijuana use were 3.53 times higher in cohorts where less than half (42-46.9%) disapproved (99% C.I. 2.75, 4.53). Conclusions: Individuals in birth cohorts that are more disapproving of marijuana use are less likely to use, independent of their personal attitudes towards marijuana use. Social norms and attitudes regarding marijuana use cluster in birth cohorts, and this clustering has a direct effect on marijuana use even after controlling for individual attitudes and perceptions of norms.

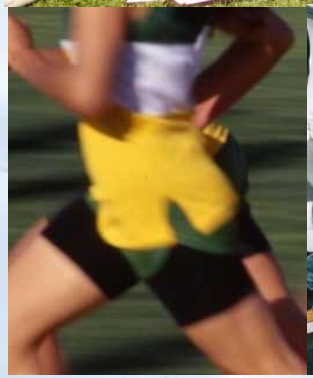
PMID: 21545669 [PubMed - as supplied by publisher]

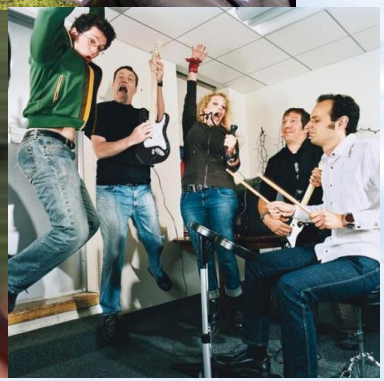
LinkOut - more resources

- Tha analysis includes 986.003 adolescents
- The project gather national data (USA) about adolescents and drug abuse
- Annual administration of a questionnaire to high school students
- About 130 schools involved every year
- Time covered by the study: 1976-2007 (31 years)

Level of disapproval 90%

USE IN THE LAST YEAR 17%

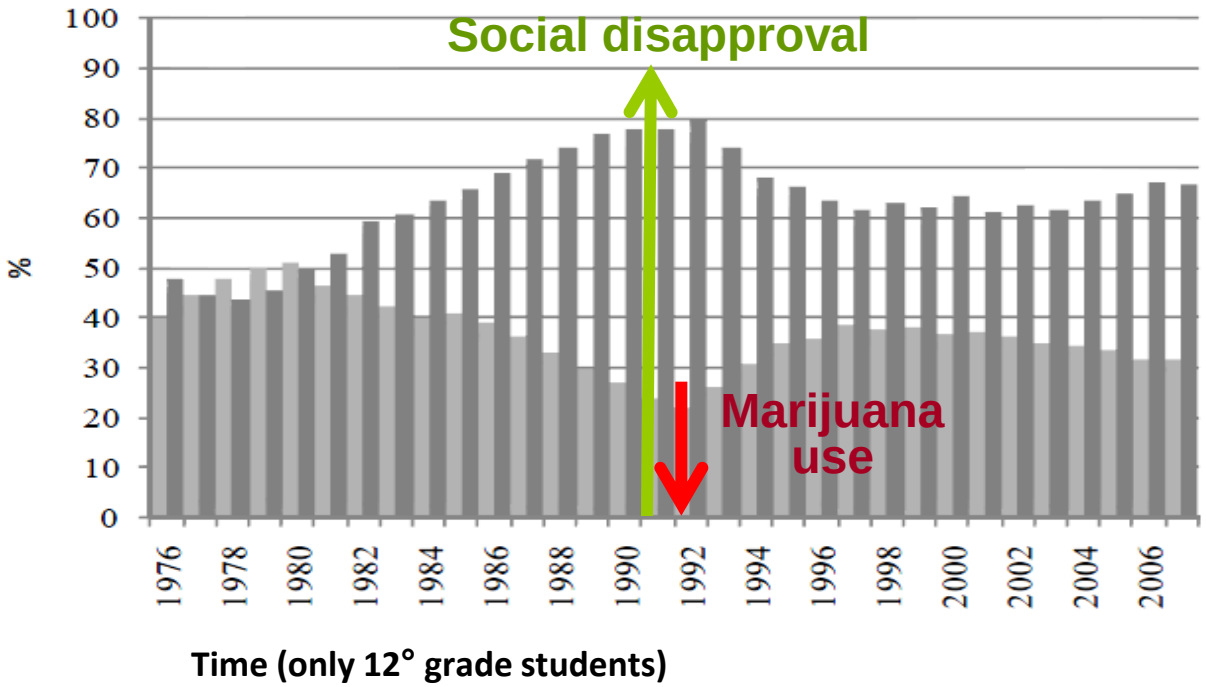




Level of disapproval 47%

USE IN THE LAST YEAR 49%

Results: trends over time



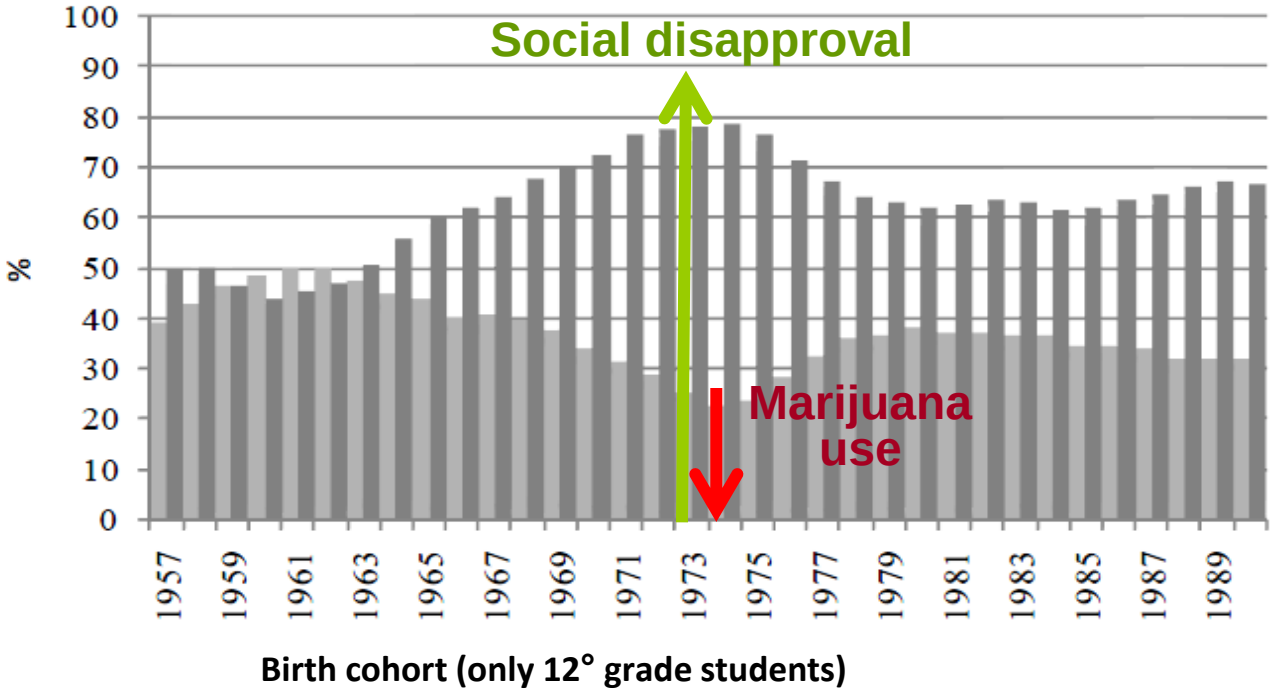
Time (only 12° grade students)

The greater the social disapproval about drug use, the lower the use of marijuana amongst adolescents <u>over time</u>

Percentage of students referring marijuana use in the last 12 months

Percentage of general population who disapproves or strongly disapproves occasional marijuana use

Source: Keyes, K.M. et al. The social norms of birth cohorts and adolescent marijuana use in the United States, 1976-2007. Addiction 2011, Accepted Article



Birth cohort (only 12° grade students)

The greater the social disapproval about drug use, the lower marijuana use among adolescents throughout the same age group

Percentage of students referring marijuana use in the last 12 months

Percentage of general population who disapproves or strongly disapproves occasional marijuana use

Source: Keyes, K.M. et al. The social norms of birth cohorts and adolescent marijuana use in the United States, 1976-2007. Addiction 2011, Accepted Article

What are the factors affecting the social disapproval?

Presence of **Laws and norms** against drug use

Presence of **social rules** against drug use

Explicit attitude against drug use from family members

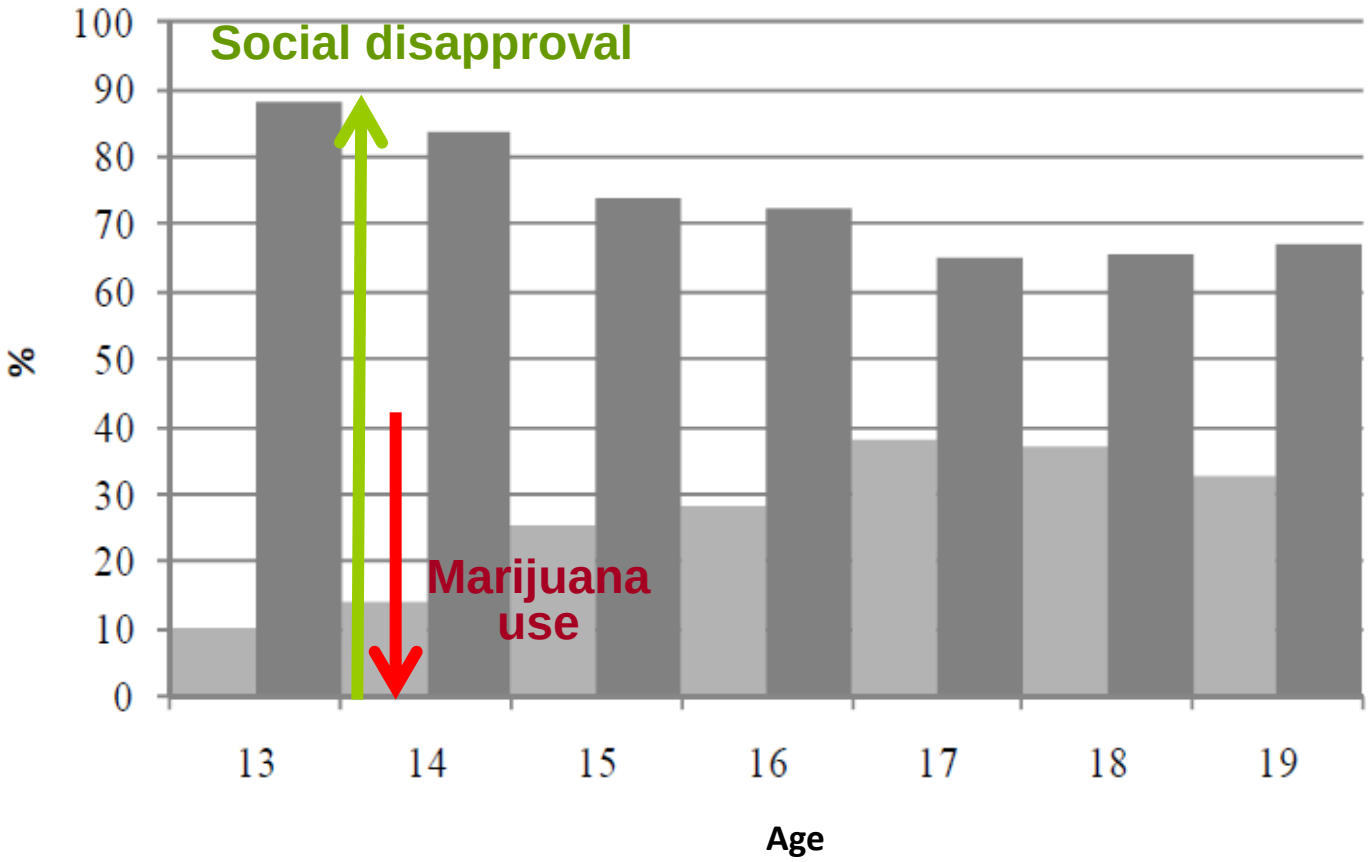
Presence of interventions **of prevention**

Explicit attitude against drug use from the peer group

Contrast to the substance availability on the envoirement

Explicit attitude against drug use from the community

Historic welfare state (demographic, economic features, etc.)



The lower the disapproval of marijuana use in the subject over time, the greater his/her use of marijuana

Percentage of students referring marijuana use in the last 12 months

Percentage of students who disapprove or strongly disapprove occasional marijuana use

Social disapproval: conclusions

- **Data demonstrates that adolescents are strongly influenced by what their coetaneous think. Therefore, social norms and behaviour, within the same group, have a direct effect on marijuana use**

4 suggestive statements for discussion

«We cannot accept a society where the use of drugs is considered a lifestyle»

«The freedoom to use drugs is not a human right»

«Drug use prevention policies must be considered a priority within the health, social and economic policies of countries»

«To be protected from the supply of drugs is a human right of children»

«To be protected from the supply of drugs is a human right of children»

The prevention of drug offered is a human right

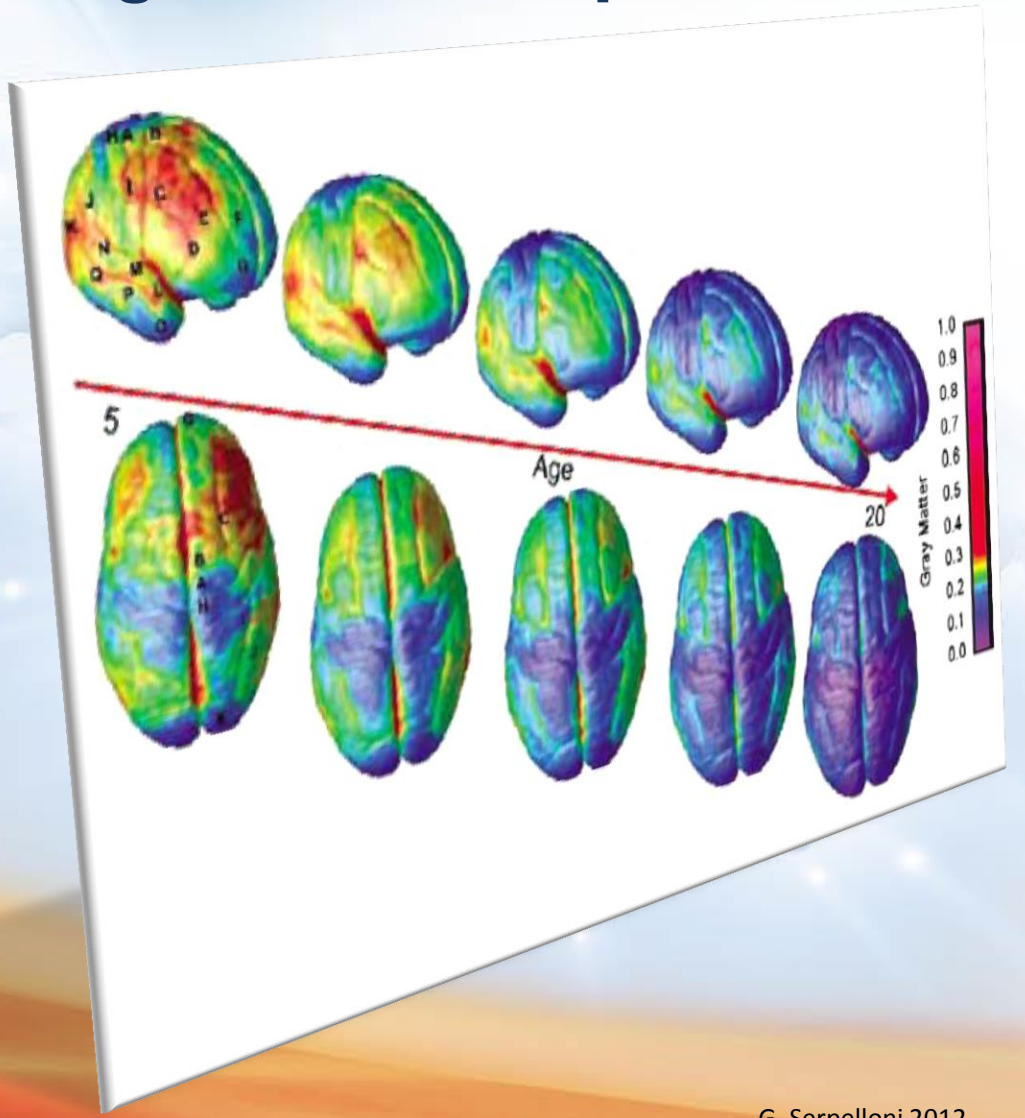
Daily life and self medication

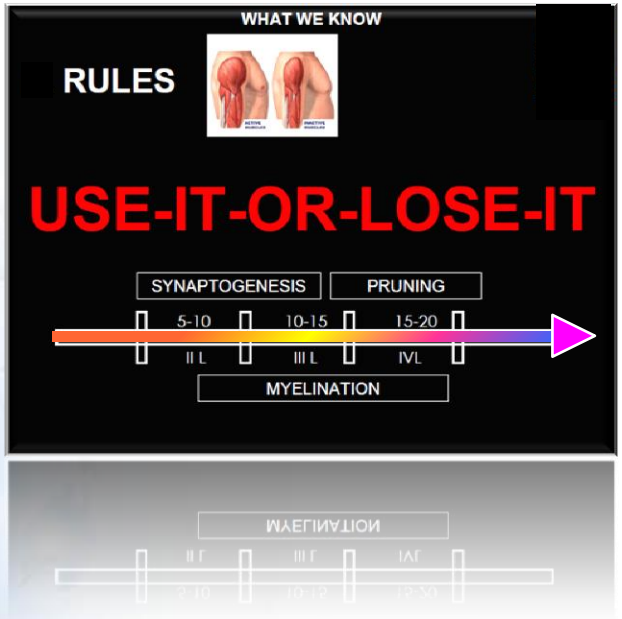
N	Condition	Linked to Used drug
1	Relationships	Ecstasy
2	Sexual performance	Cocaine/Sildenafil
3	Sport performance	Ephedrine, cocaine
4	Work performance	Cocaine, amphetamine
5	Anxiety	Cannabis, alcohol, bezodiazepine
6	Sadness and depression	Cocaine
7	Boredom	Cannabis
8	Overweight	Amphetamine, cocaine
9	Entertainment	Poli drug use and alchohol
10	Over excitation related to «high» drug use, insomnia	Heroin

G.Gerra 2012

«We dont want our children growing up in a pharmmacy»

Drug use and impairment of brain development





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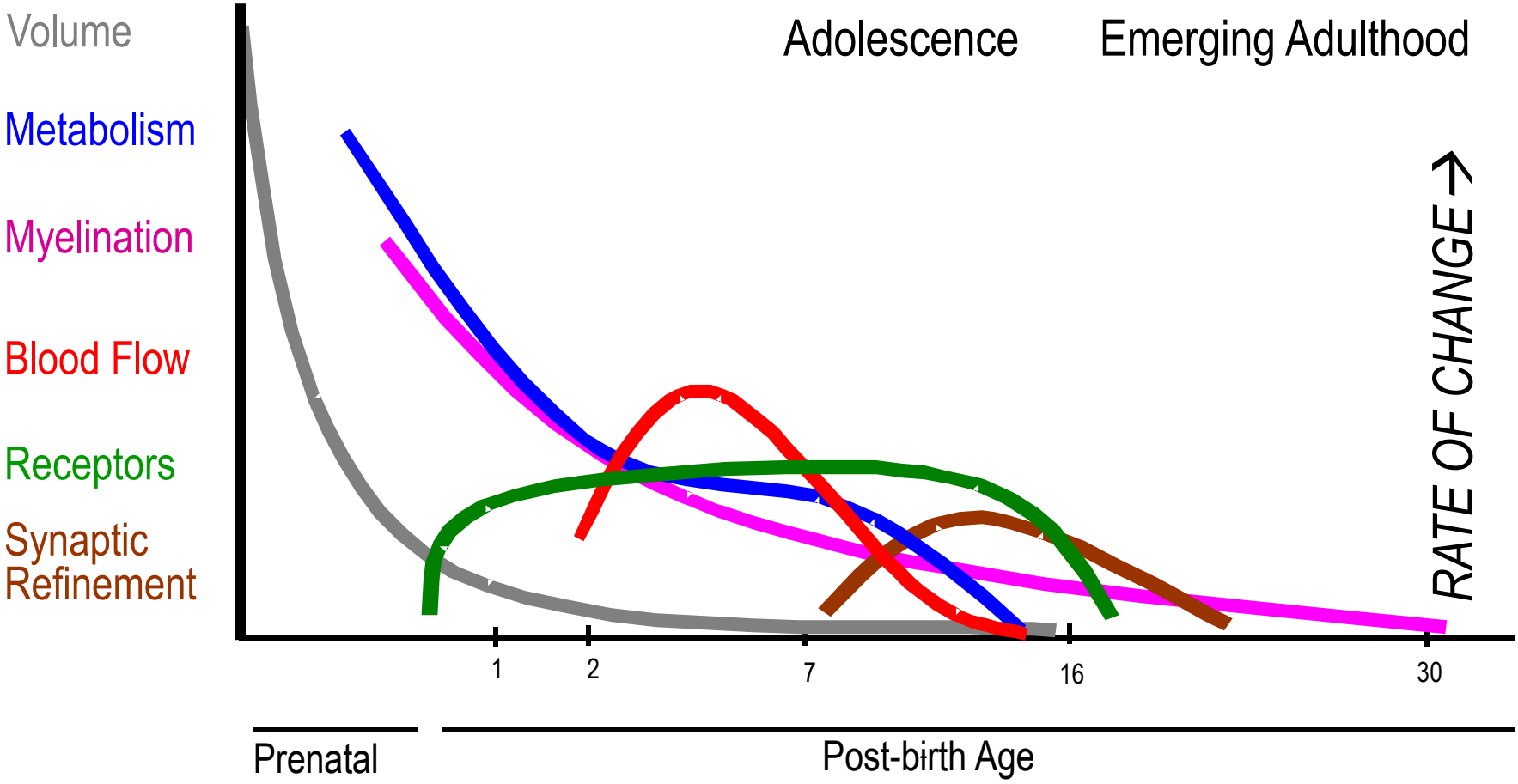
Adolescent Brain Development



Tapert & Schweinsburg, 2005

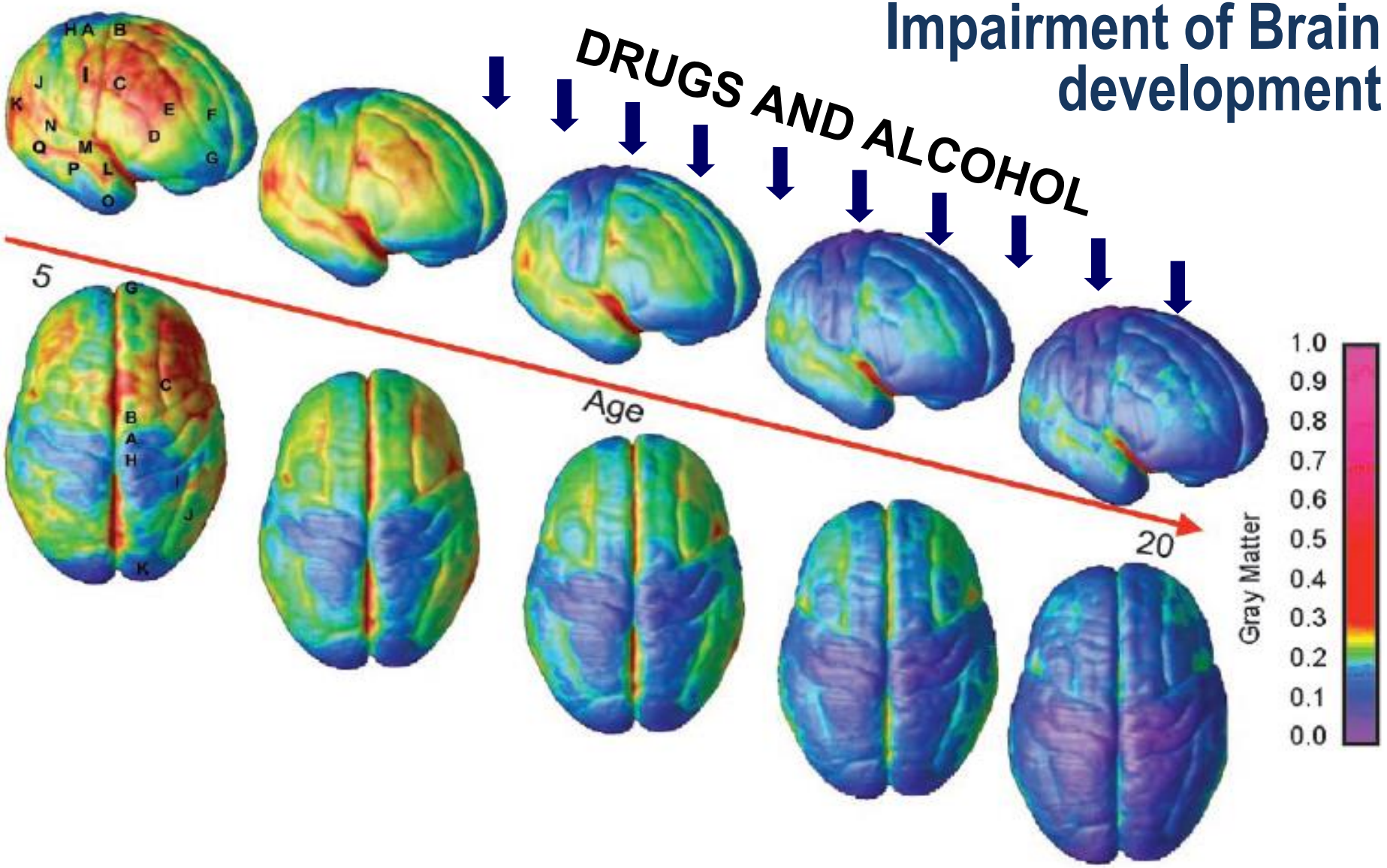
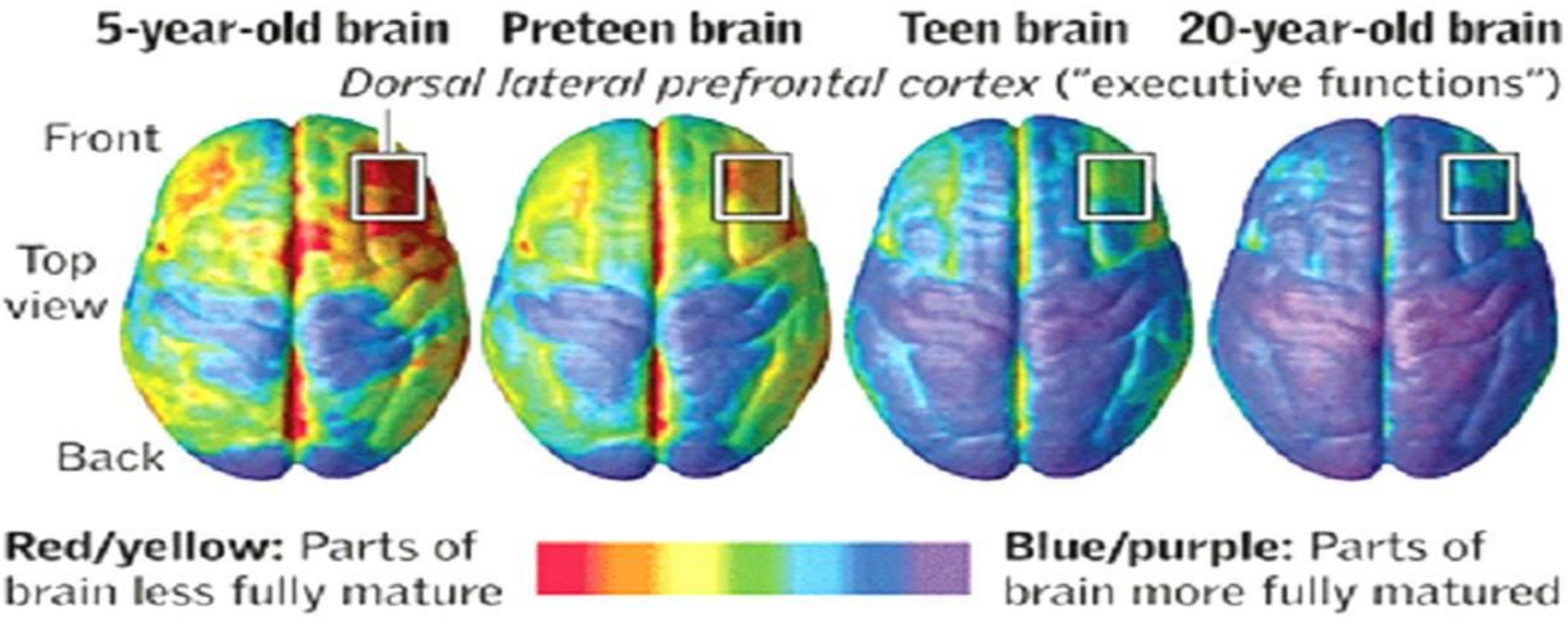


Fig. 3. Right lateral and top views of the dynamic sequence of GM maturation over the cortical surface. The side bar shows a color representation in units of GM volume. The initial frames depict regions of interest in the cortex as described for Fig. 1. This sequence is available in Movies 1–4 in the supporting information.

Judgment last to develop

The area of the brain that controls "executive functions" — including weighing long-term consequences and controlling impulses — is among the last to fully mature. Brain development from childhood to adulthood:

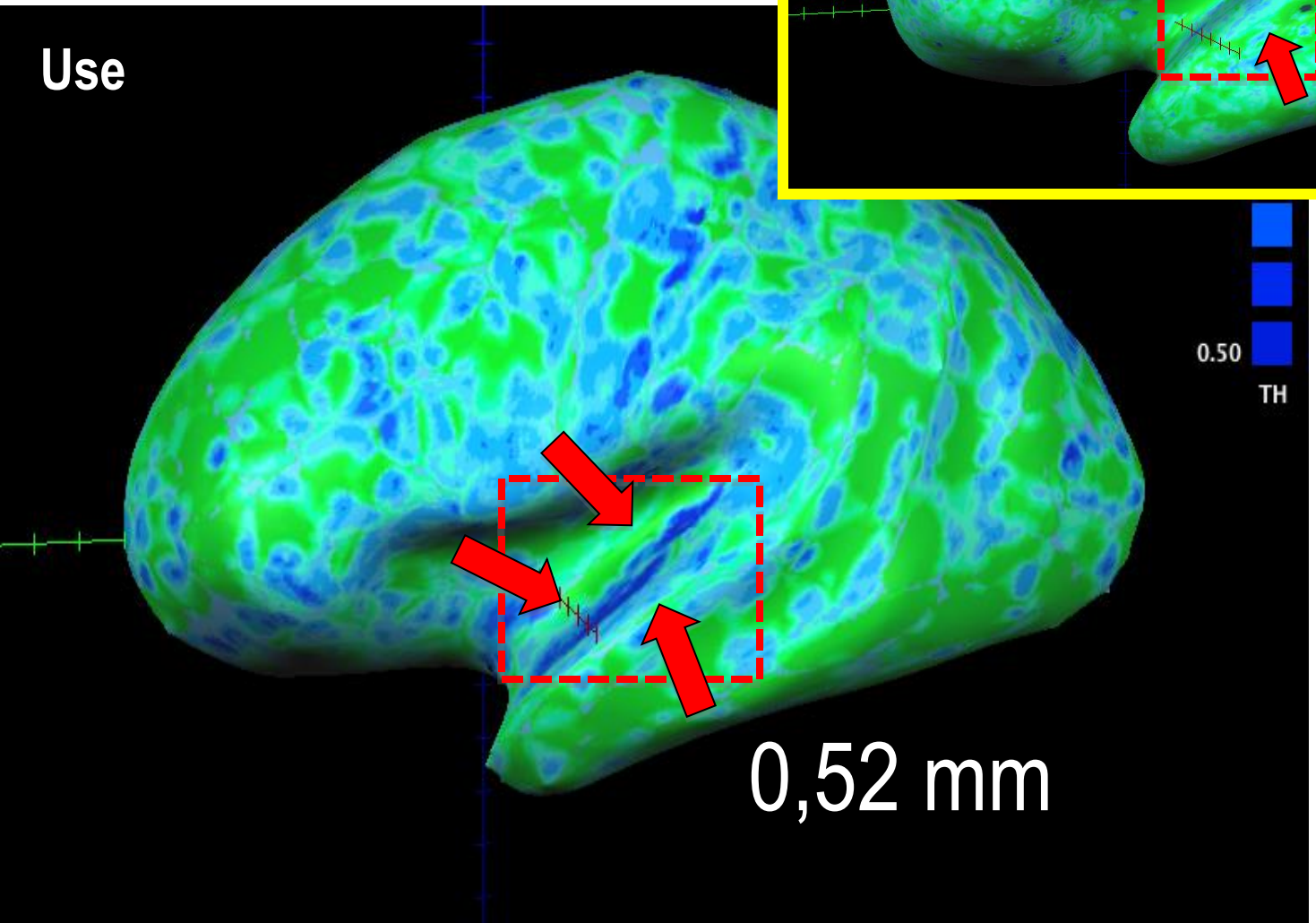


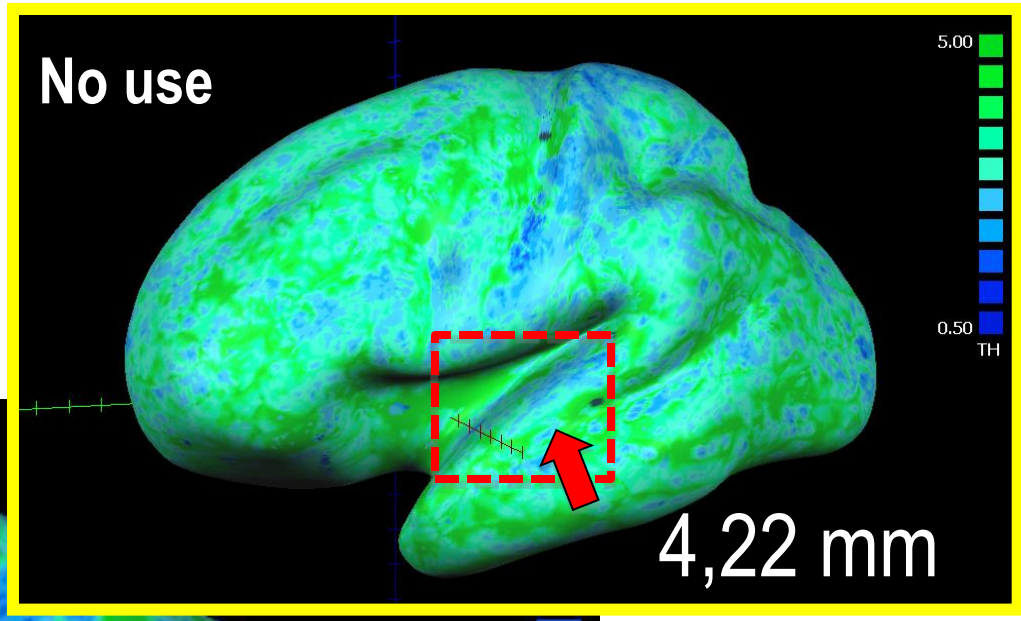
Sources: National Institute of Mental Health; Paul Thompson, Ph.D., UCLA Laboratory of Neuro Imaging

Thomas McKay | The Denver Post

Decrease of cortical thickness

Cannabis use

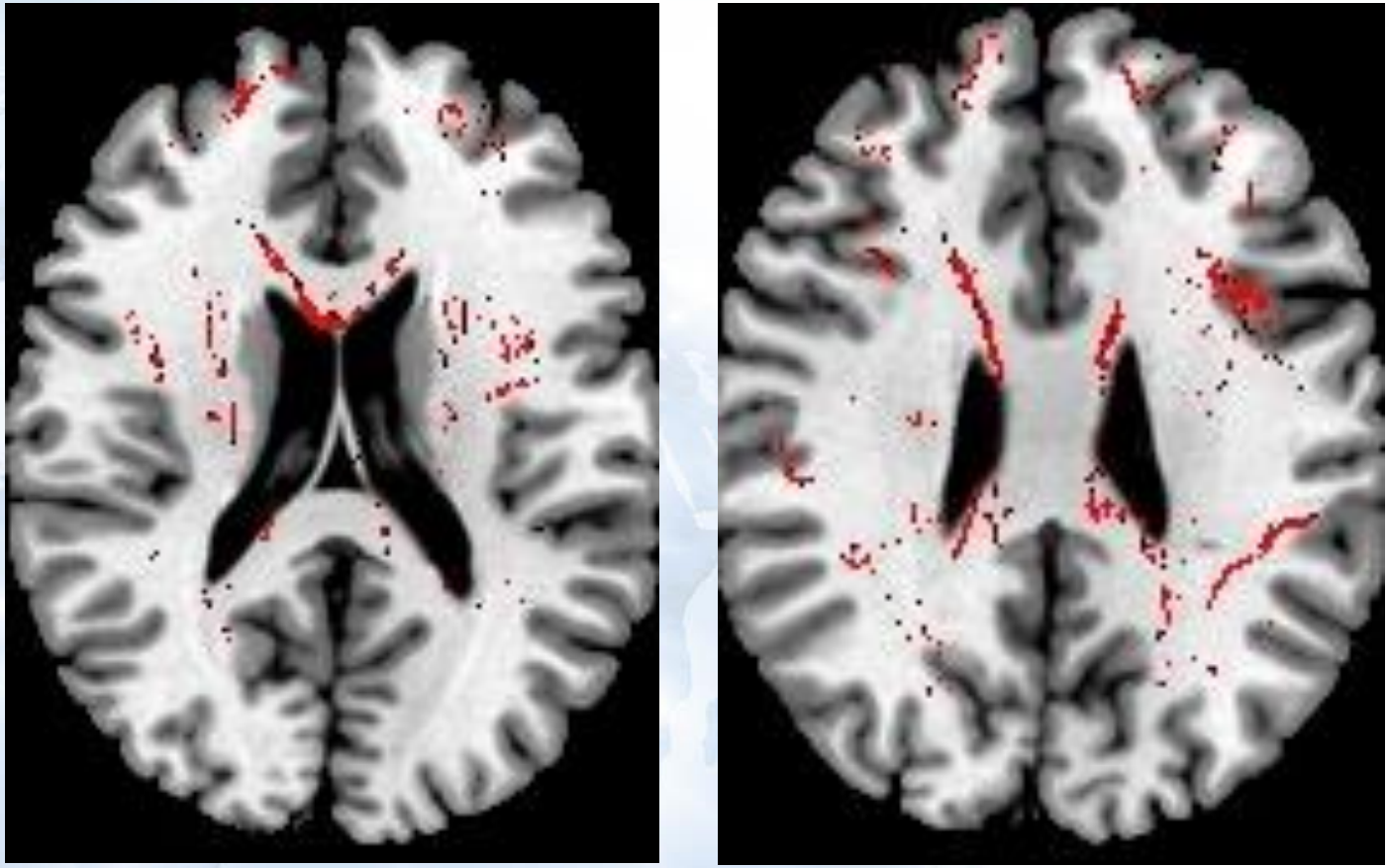




Temporo-mesial area

G.Serpelloni 2011

Cannabis users have also a degeneration of white matter



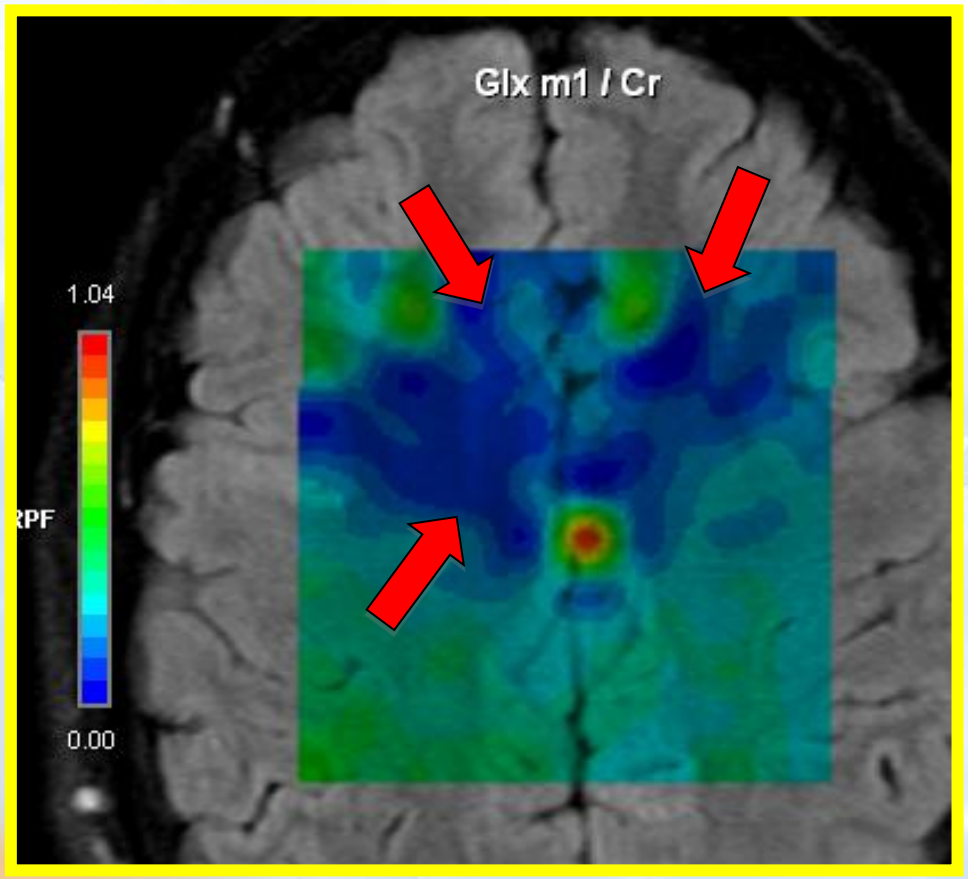
degeneration of white matter

TBSS (Tract Based Spatial Statistic)

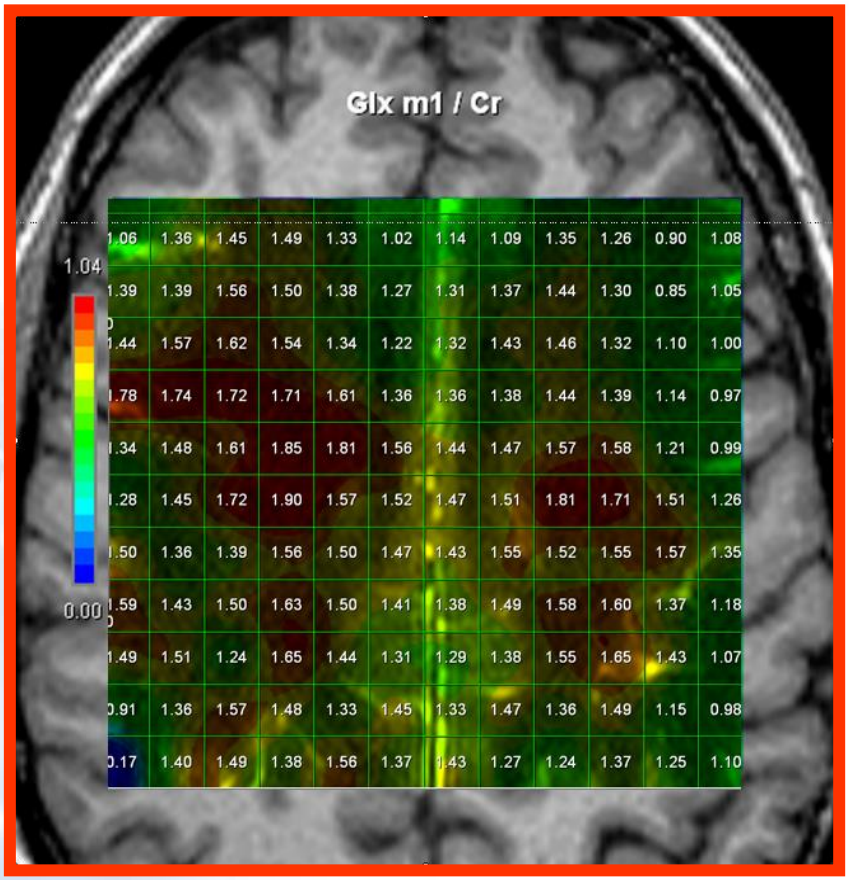
G. Serpelloni 2012

RM Spettroscopy

Cannabis use



Non use



Lack of Glutamate

Normal Glutamate

NORMAL BRAIN SPECT

Effects of Marijuana – SPECT

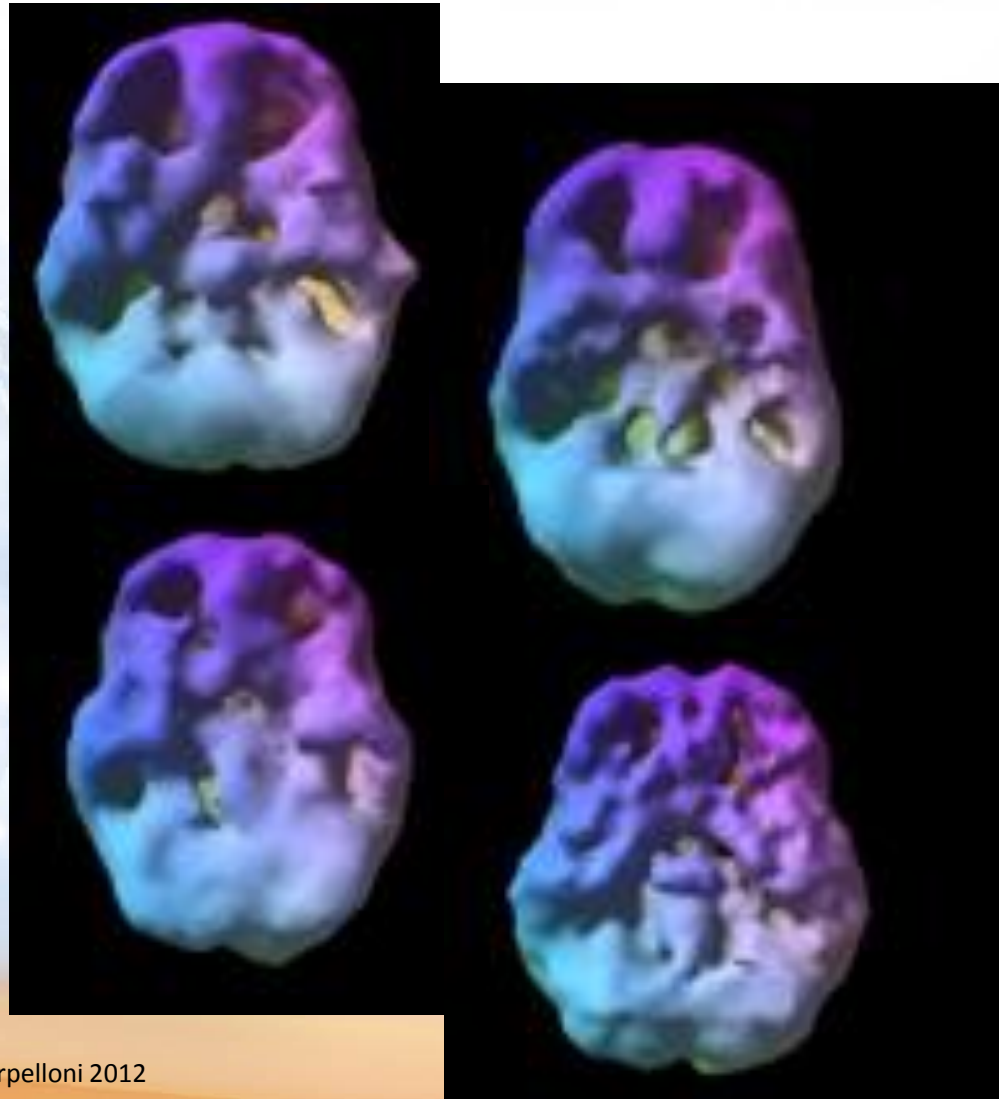
Journal of Psychoactive Drugs, Volume 30, No. 2 April-June 1998. Pgs 1-13.

18 y/o - 3 year history of 4 time x week use
underside surface view
decreased pfc and temporal lobe activity

16 y/o -- 2 year history of daily abuse
underside surface view
prefrontal and temporal lobe activity

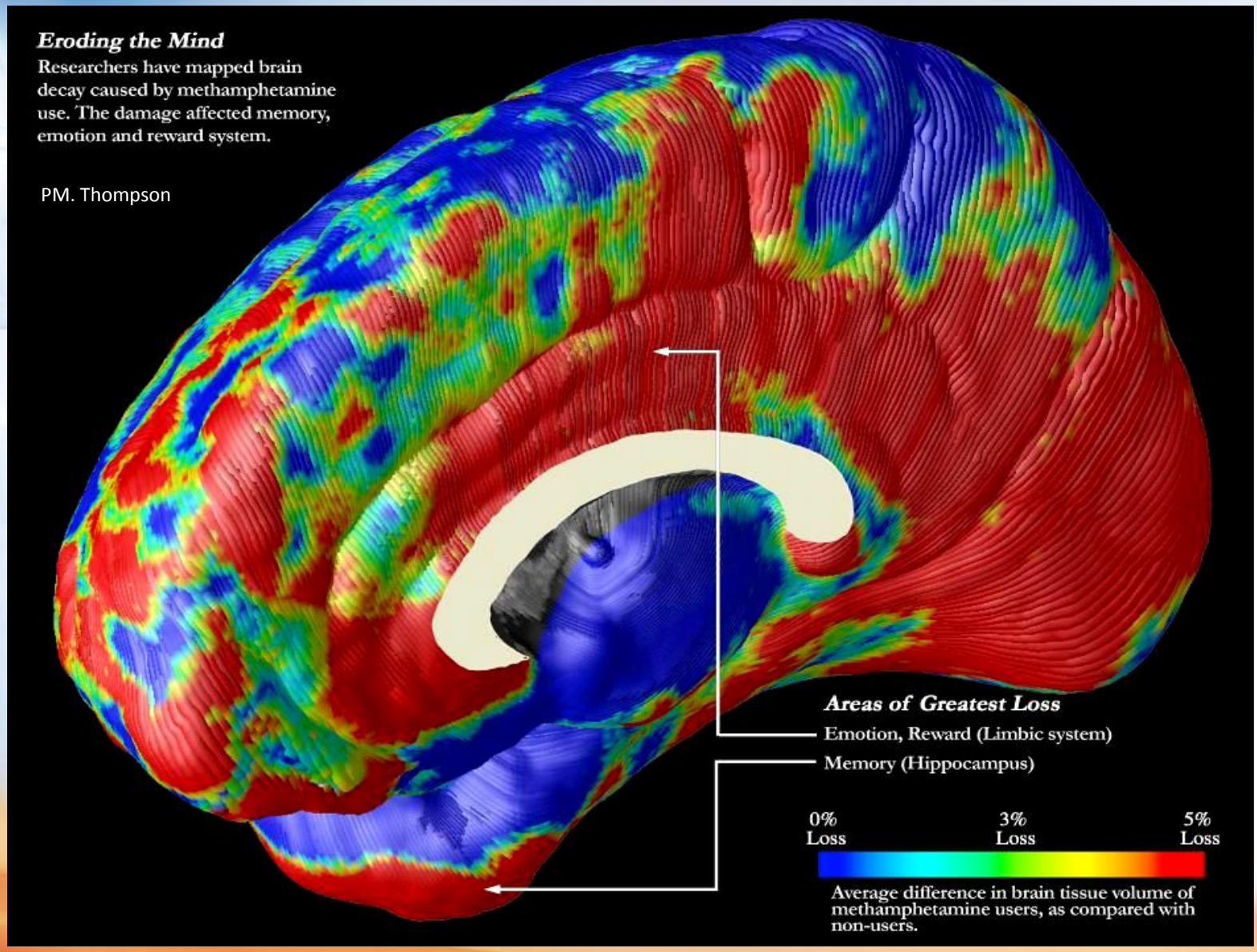
38 y/o -- 12 years of daily use
underside surface view
decreased pfc and temporal lobe activity

28 y/o -- 10 years of mostly weekend use
underside surface view
decreased pfc and temporal lobe activity



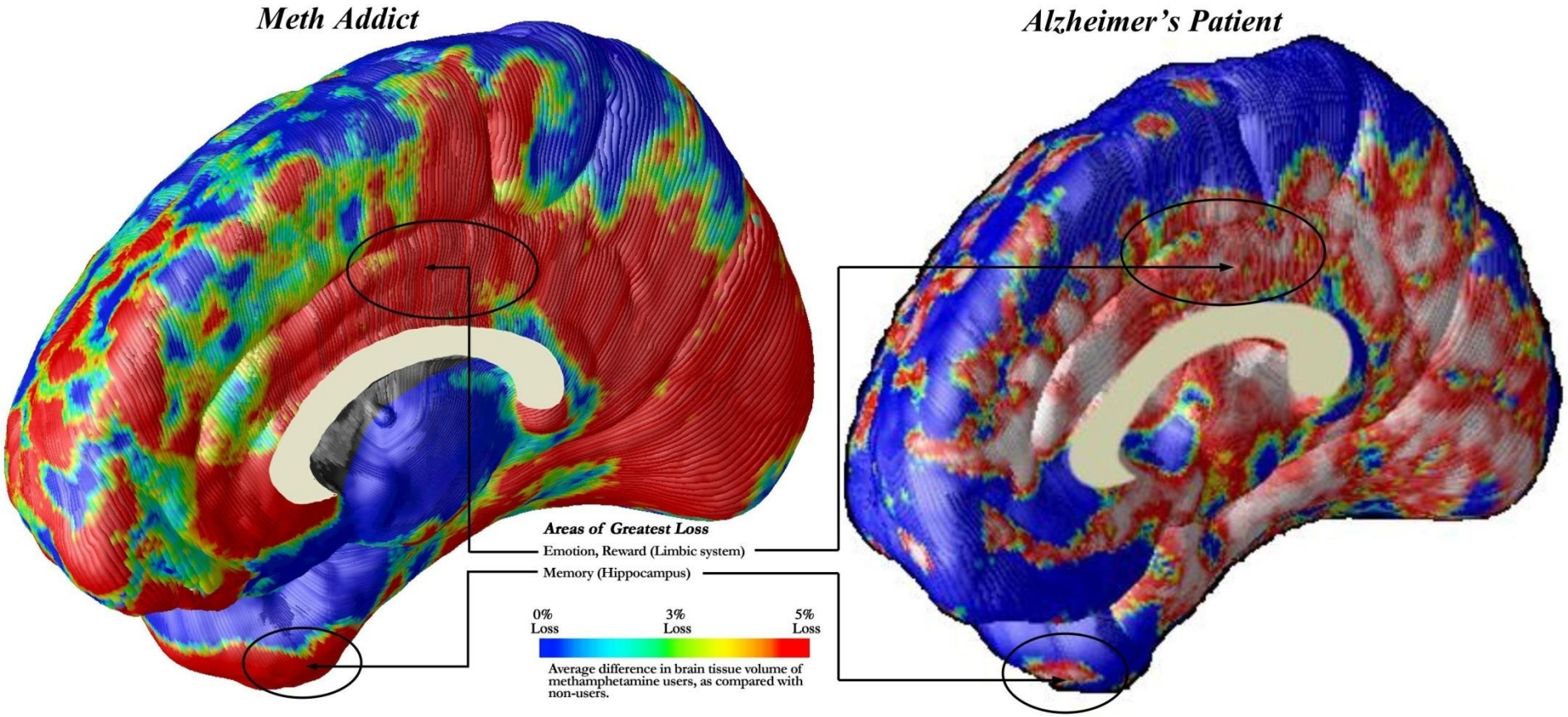
G. Serpelloni 2012

Methamphetamine use and degeneration of gray matter



MDMA ←→ Alzheimer

Eroding the Mind: Researchers have mapped brain decay caused by methamphetamine use (left). The damage affected memory, emotion, and the reward system. Notice the similarities to the brain decay caused by Alzheimer's Disease (right).

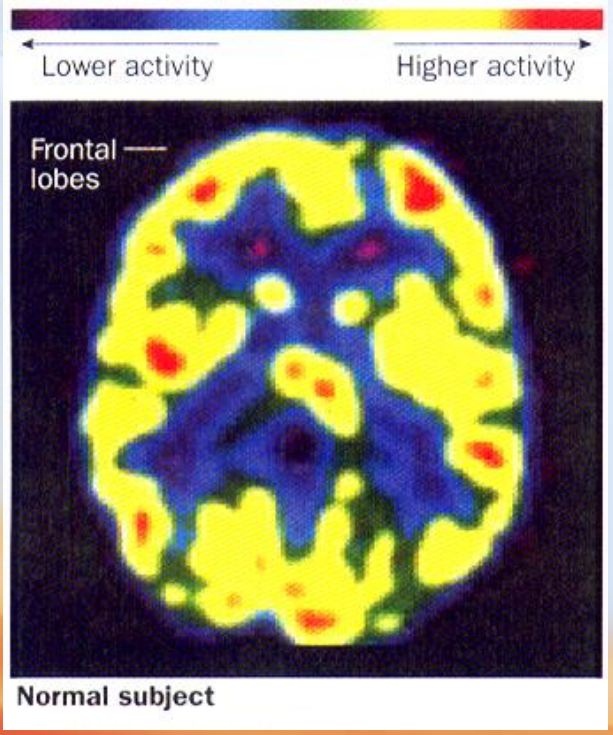


COCAINE

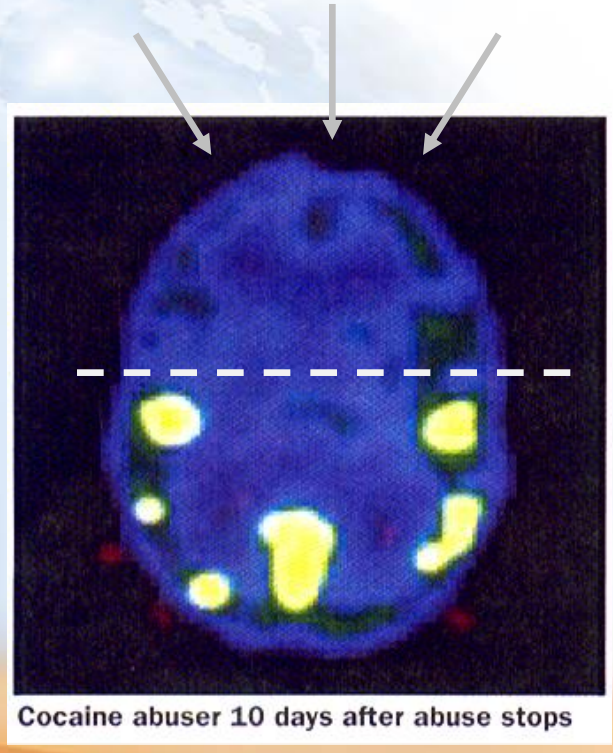
The brain of an addict

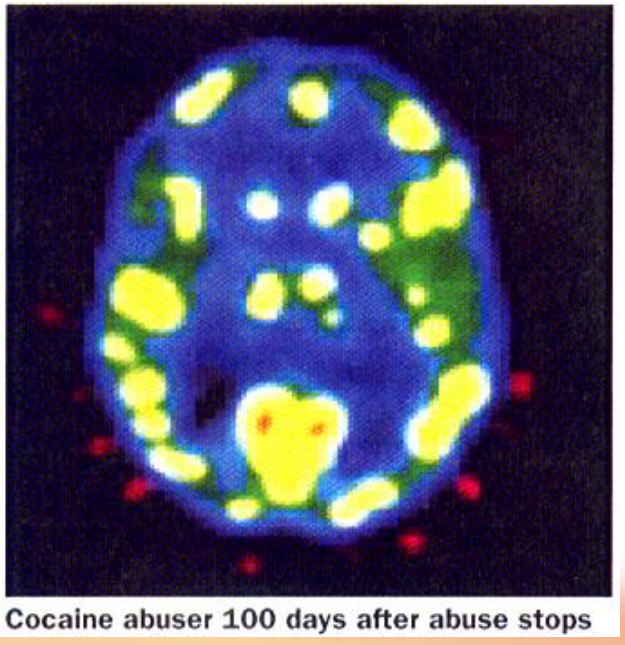
Cocaine use causes a decrease in glucose metabolism in the brain, especially in the frontal lobes, where planning, abstract thinking and regulation of impulse behavior are governed.

PET: INHIBITION OF PREFRONTAL CORTEX, responsible for voluntary control of behaviour, for correct reality perception, of awareness, of judgment, etc. (Nora Volkow)



Normal subject


Cocaine abuser 10 days after abuse stops


Cocaine abuser 100 days after abuse stops

Prevention: Remarking 3 point

1. «Vulnerable People» concept
2. The role of family and school (Educational approach)
3. Delay of discovery of drug use
(Early detection for early intervention)

Prevention: Remarking firsth point

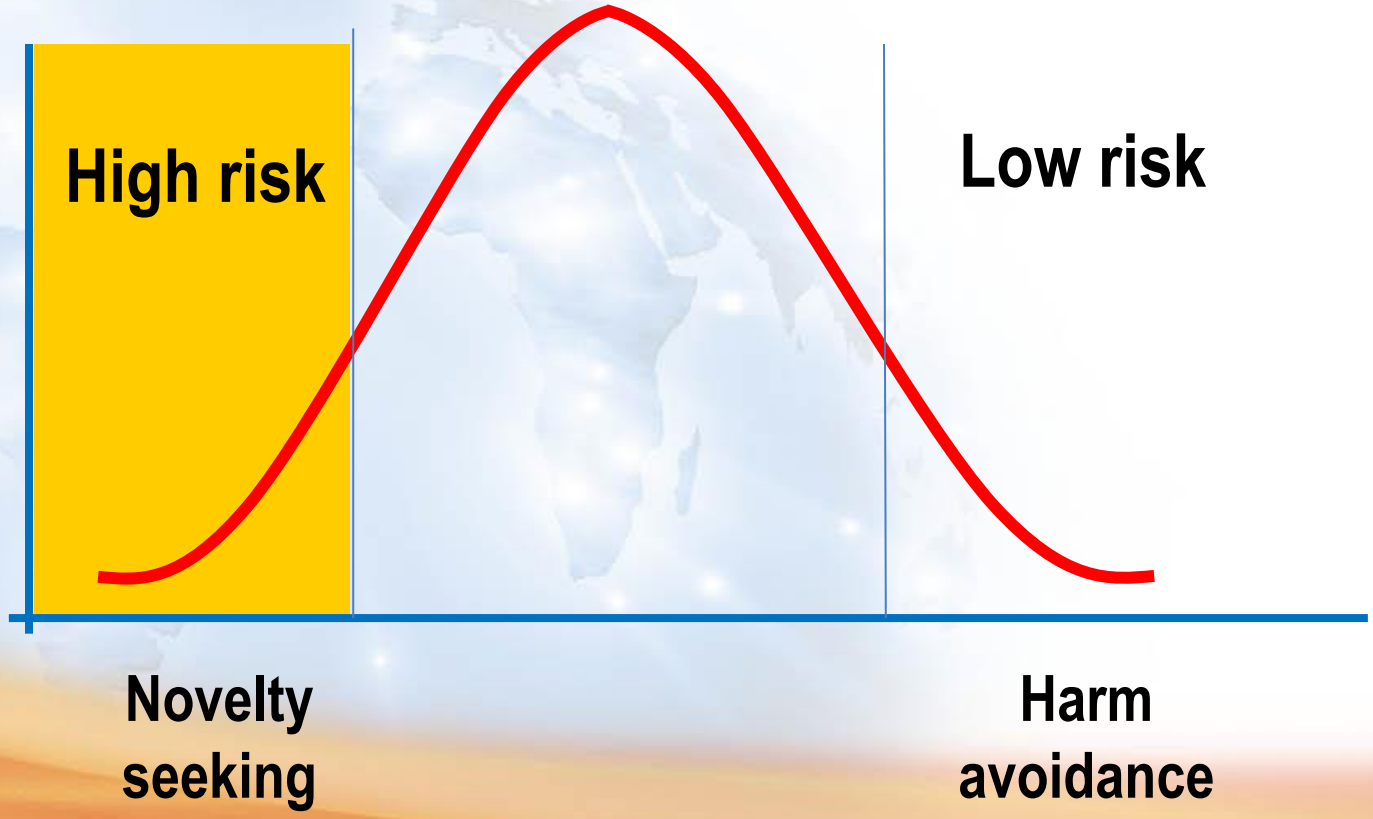
1. «Vulnerable People» concept
2. The role of family and school (Educational approach)
3. The delay of discovery of the drug use (Early detection for early intervention)

Vulnerability

- **Some people are more vulnerable to start and to continue using drugs than others**
- These people have same vulnerabilty markers:
  - Drug exposure during pregnancy
  - Different genotype and neurocognitive system (reward and behaviour control) → Hyperactivity and attention deficit
  - Poor parenting care
  - Physical ad emotional neglect or abuse
  - Adverse social conditions
  - High drug availability

It is necessary to be aware of the different behaviour of young people

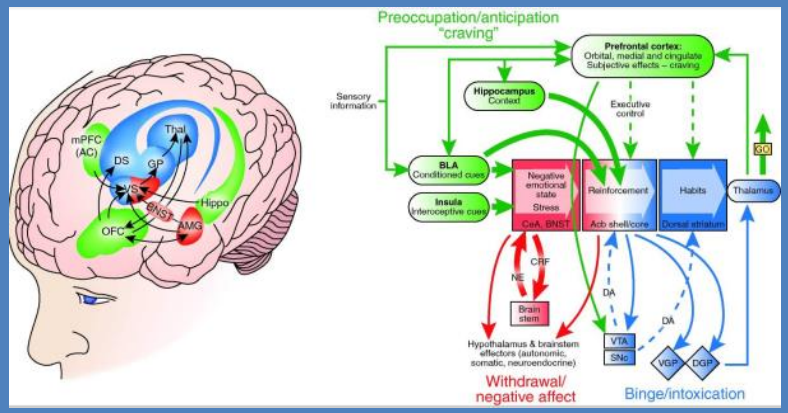
Some adolescents are more vulnerable to drug use than others



Expression of different behaviour for the same cue

Different structure and function of the neurological and cognitive system (reward system – dopamine - control system – serotonine - emotional drive - noradrenaline)

Genetic factors



Psycho-social factors

Different behavioural reactions:

1. To environmental cues of risk
2. To educational and informative interventions

Conditioning factors: typology

Individual factors 1

Family, social and environmental factors 2

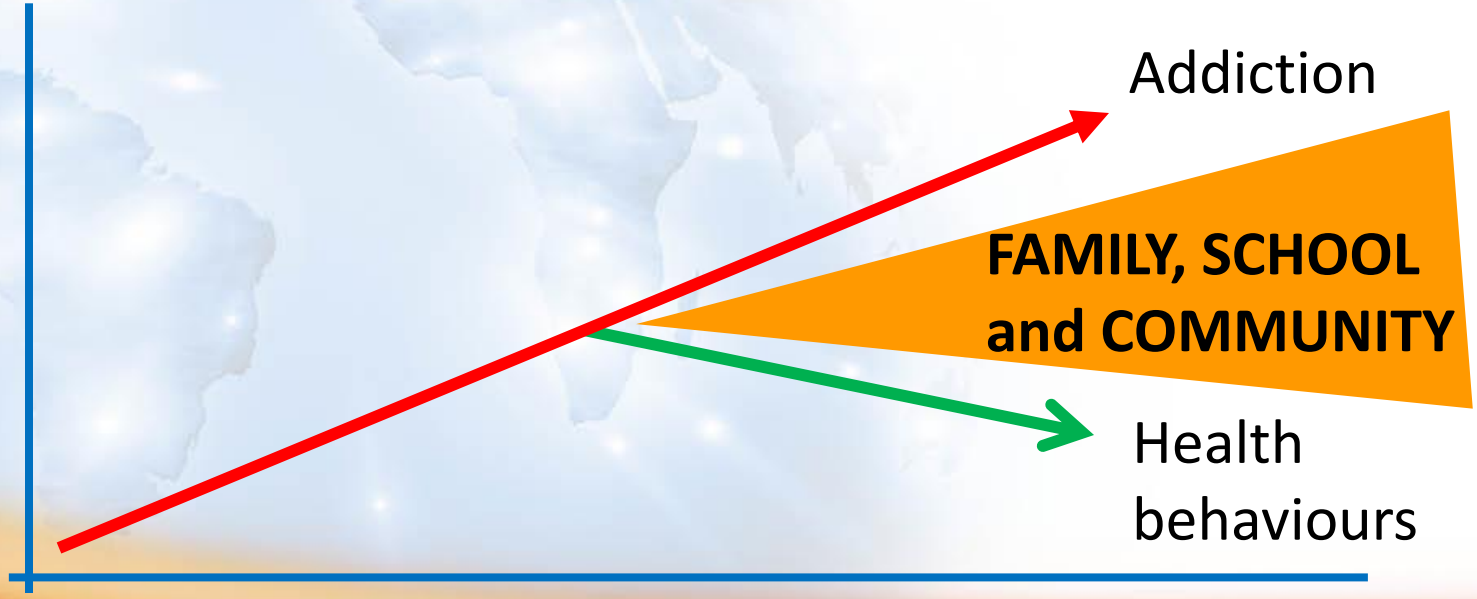
Characteristics of the Substance 3

Prevention: Remarking second point

1. Vulnerable People
2. **The role of family and school (Educational approach)**
3. The delay of discovery of the drug use (Early detection for early intervention)

2 Vulnerability: the role of family and school

VULNERABILITY…….BUT
IT IS POSSIBLE TO CHANGE THE ROUTE OF CHILDREN AT RISK



BUT it is possible to change the route of children at risk!

VULNERABLE YOUNG PEOPLE

RISK

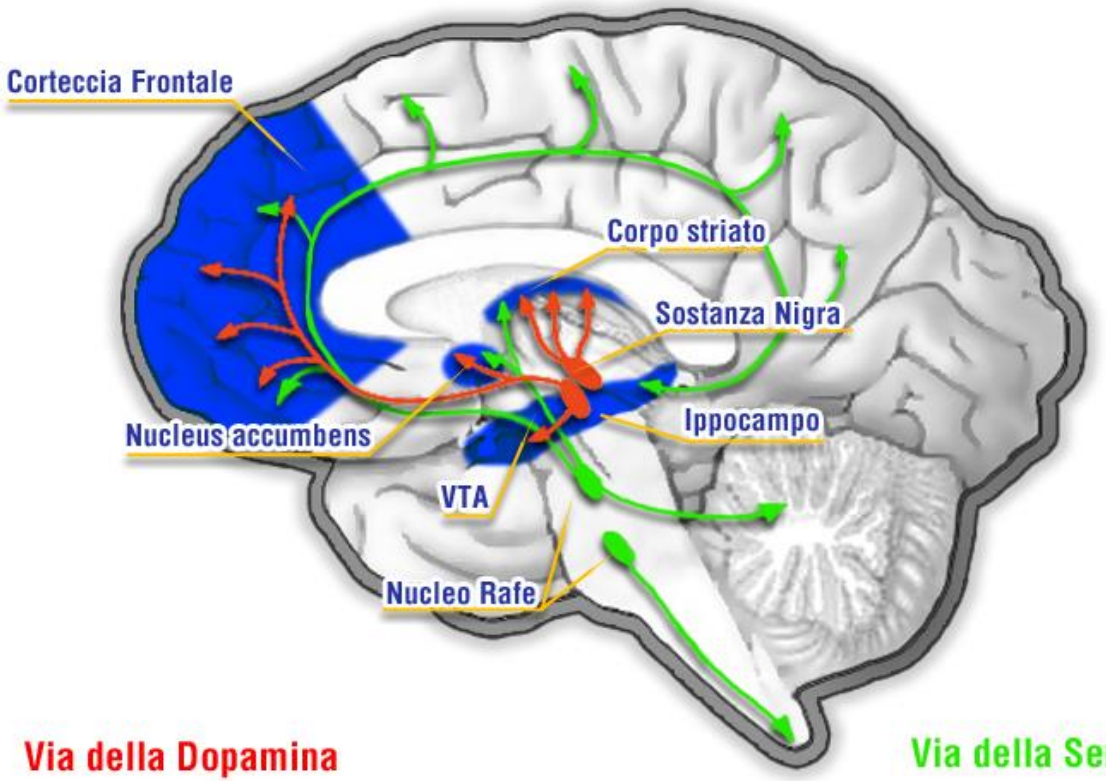
- Trauma
- Abuse
- Neglect
- Affectionless control
- Lack of supervision
- Adverse experiences

POSITIVE FAMILY SCHOOL and COMMUNITY MAKE THE DIFFERENCE

RESILIENCE

- Protection and support
- Warm care style
- Monitoring and supervision
- Acceptance
- Rewarding authonomy
- Clear rules

Different reward and control systems is not an «addiction destiny»



Via della Dopamina

Funzioni:

- Ricompensa (motivazione)
- Piacere, euforia
- Funzione motoria (messa a punto)
- Compulsione
- Perseverazione

Via della Serotonina

Funzioni:

- Umore
- Processi di memoria
- Sonno
- Cognizione
- Autocontrollo

To prevent drug use…

1. The CORE of prevention is:
2. Interpersonal relationships with children
3. The relevance of the human aspect and social relations in prevention

Developing evidence based programs for families

«Feeling of love = Showing of love»

J.Mark Eddy, 2011

for parents…..

- To be present
- To engage
- To pay attention
- To respond
- To not give up
- To seek support
- To be a role model
- To be coherent

Type of prevention

Tab.1

Type of prevention	Main target	Specifications	Macro indicators of risk	Risk-increasing conditions	Main aims of preventive action
Selective	Subjects who have **not yet used** drugs or pyschotropic substances (including alcohol, tabacco, medication) but who have a specific above-average risk of illness, linked to the presence of individual and/or environmental factors	Subjects with behavioural disorders or attention deficit disorders (factors linked to individual vulnerability that involve an increased risk of developing addiction if they use substances).	Poor academic achievement Agressivity Relationship difficulties Hyperactivity Cognitive deficits Parents with drug addictions	Poverty Problematic social environment Easy access to substances Problematic family Low presence of preventive schemes Stressful events	Early detection of disorders and risk factors, and managing the situation properly in the family and at school **(Early detection and Early intervention → risk factors)**
Indicated	Subjects who have **used substances and continue to use them in a discontinuous and «experimental» way** but without addiction	Subjects who occasionally and/or periodically use substances (e.g. weekend drug users) in an initial stage but with a progressive risk of becoming addicted	Early use of alcohol or tobacco Mood swings Changes in behaviour and routines Decline in school performance Changes in sleeping patterns Changes in eating habits	Previous behavioural/attention disorders Poverty Problematic social environment Easy access to substances, Problematic family Peers at risk (widespread use of substances), Stressful events Limited preventive schemes	Early detection of drug use and managing the situation correctly in the family and at school **(Early detection and Early intervention → substance use)** Early diagnosis of possible addiction Reduction of progressive risk

Type of prevention

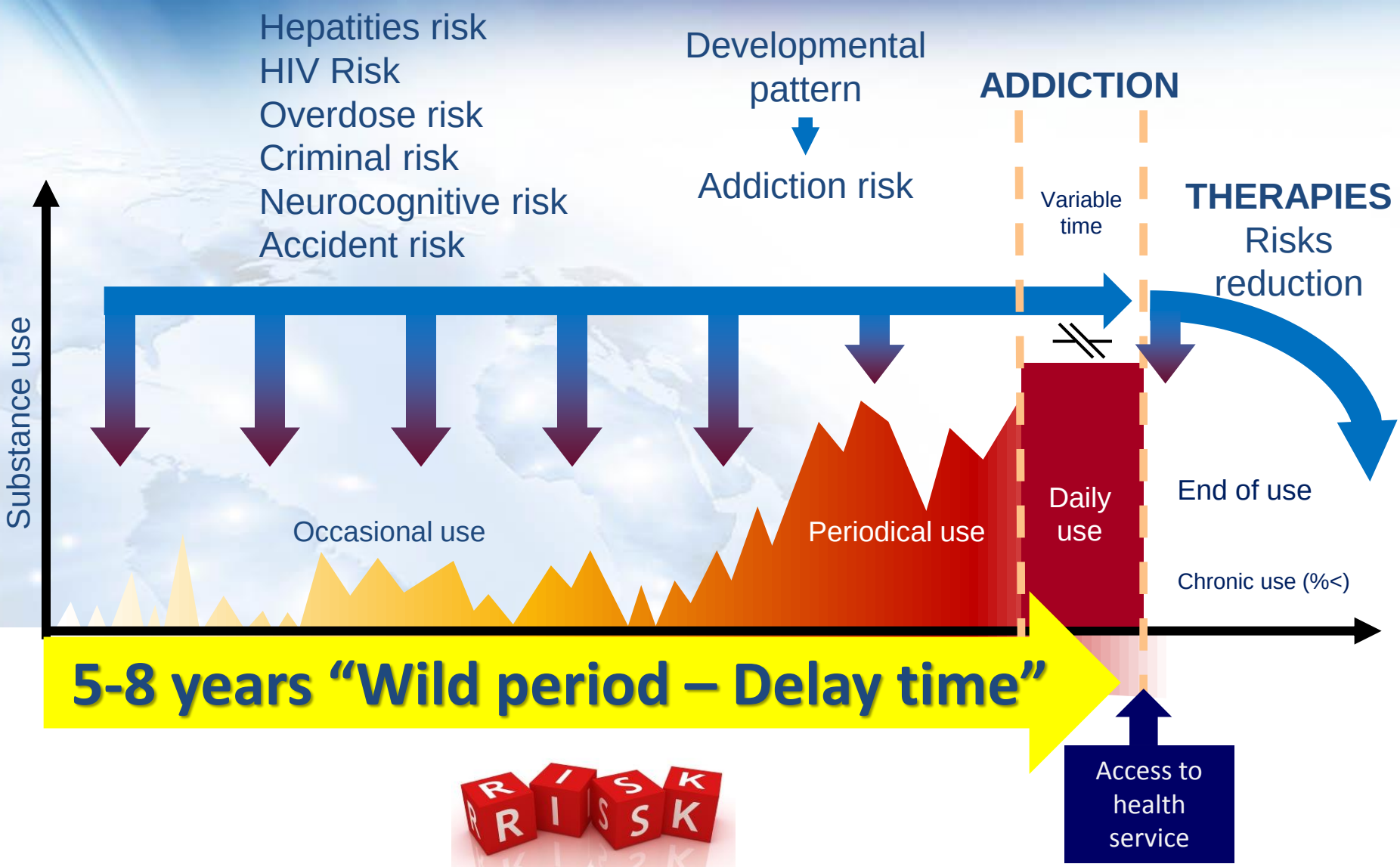
Tab.2

Type pf prevention	Main target	Specifications	Macro indicators of risk	Risk-increasing conditions	Main Aims off preventive action
Universal	All subjects	Aimed at the entire population. Geared mainly towards general preventive aspects with basic recommendations, designed to communicate the risks and the dangers linked to drugs, alcohol, tobacco, and developing a possible addiction.	….	….	General communication and information on the dangers of substance abuse and related risks It supports, facilitates and organises schemes aimed at the entire population and geared towards promoting, maintaining and recovering good health .
Environmental	All subjects, governments, and organisations involved in prevention processes	This involves creating coherent anti-drug communication and anti-drug behaviour in all areas associated with young people.	Absence of official, organised preventive programmes and campaigns	Incoherent messages and action in various fields and in the work of various governments and organisations connected to young people (state, regional and municipal government, school, society etc)	Giving coherency to messages, action and environmental characteristics (at various levels) with anti-drug, anti-alcohol and anti-tobacco strategies.

Prevention: Remarking third point

1. Vulnerable People
2. The role of family and school (Educational approach)
3. **The delay of the discovery of drug use (Early detection for early intervention)**

Prevention Strategy and Policy Makers



MEMO: we must remember….
Drug use and drug related accidents

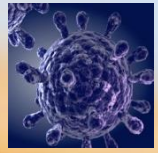
First cause of death among young people 14-21 years old

Onset	First treatment	Delay time (years)
heroin: 21 y.o.	heroin: 26 y.o.	5
cocaine: 22 y.o.	cocaine: 31 y.o.	9
cannabis: 17 y.o.	cannabis: 25 y.o.	8

Delay time before treatement from 5 to 8 years

Fonte DPA, Relazione al Parlamento, 2010

Delay of diagnosis and intervention of:

	Delay of diagnosis is for:	Main Consequences
	1. Presence of behavioural disturbancies in the young people (vulnerability to addiction) before drug use	Increased risk of anti-social behaviour and drug use/addiction in the future
	2. Early use of substances (alcohol, substance of abuse, prescribe drugs obteined illigaly, etc.)	Impairment of physiological brain development
	3. Presence of drug addiction	Risk of death or mental illness and criminal implication
	4. Presence of related diseases	Delay of HIV infection discovery (increased risk of HIV transmission) and of access to treatment (increased risk of AIDS development)

There is a strong need to carry out structural and permanent programs for early detection and intervention in the health national system

EARLY DETECTION of: vulnerability factor (before drug use) and early drug use

FOR EARLY INTERVENTION

UN RESOLUTION 51/3, 2008

Early detection of drug use cases by health- and social-care providers by applying the principles of interview screening and brief intervention approaches to interrupt drug use progression and, when appropriate, linking people to treatment for substance abuse

The Commission on Narcotic Drugs,

Recalling the Political Declaration adopted by the General Assembly at its twentieth special session, in which Member States recognized that action against the world drug problem was a common and shared responsibility requiring an integrated and balanced approach,[28] by which supply control and demand reduction reinforced each other, as enshrined in the Declaration on the Guiding Principles of Drug Demand Reduction[29] and the measures to enhance international cooperation to counter the world drug problem,[30]

10 main principles for a scientific oriented prevention plan (an Italian proposal)

1. **Early detection and intervention**
2. **Regarding all substance abuse** (alchohol, tobacco, drugs, medicines, inhalant…)
3. **Selective** for high risk in young people (vulnerable) and differentiated (gender, temperament, environment)
4. **Permanent and consistent**
5. **Coherent (one way information)** (info to community and in different location)
6. **Supported by social disapproval**
7. **Focused on family, school, workplace, community, internet**
8. **Educative approach**
9. **Scientific oriented and with assessment of outcome**
10. **Associated to deterrents and sanctions for drug use and traffiking repression** (balanced approach)

EVIDENCE BASED PRACTICE

"Evidence Based Practice (EBP) is the use of systematic decision-making processes or provision of services which have been shown, through available scientific evidence, to consistently improve measurable client outcomes. Instead of tradition, gut reaction or single observations as the basis of decision making, EBP relies on data collected through experimental research and accounts for individual client characteristics and clinician expertise."

Evidence Based Practice Institute, 2012
http://depts.washington.edu/ebpi/

WHY prevention?

HOW to do prevention?

WHERE to do prevention?

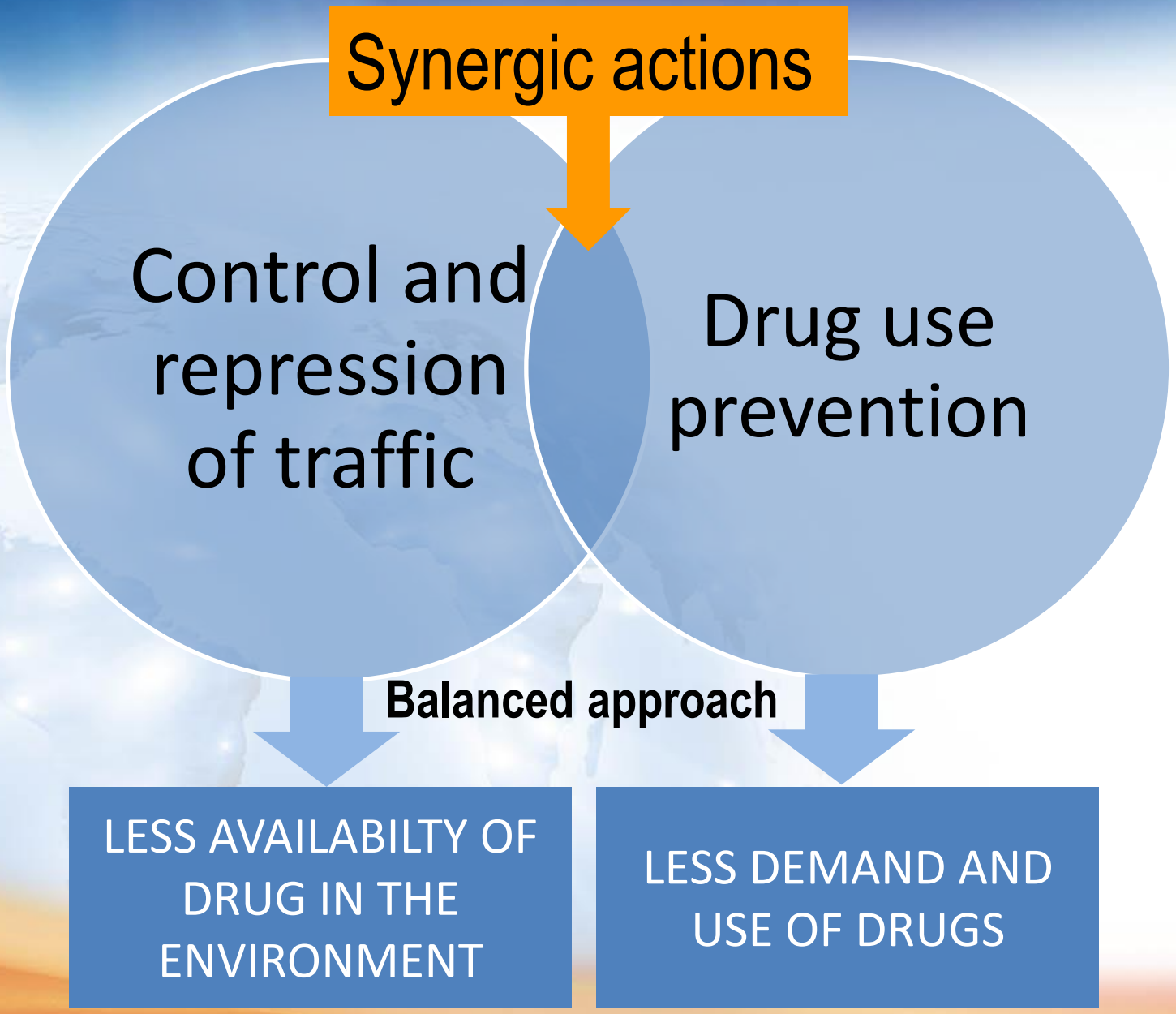
WHEN to do selective prevention in lifespan?

WHY prevention?

1. **Drug prevention is cost effective:**
   for 1 euro invested = 10 euro saved
2. **Drug prevention also reduces:**
   - Violence and crime
   - Infectious diseases
   - Mental diseases
   - Lack of potential and resources (human and social capital)
   - Medium and long term social and health costs

HOW to do prevention?

1. By Interactive intervention
2. By Normative education (social conformity)
3. By Increase personal and social skills
4. By Early detection program
5. By Gender oriented intervention
6. By «a real Partnership» with young people
7. By «Partnership» with educative actors
8. By Balanced approach: traffic repression and drug use prevention


Synergic actions
Control and repression of traffic
Drug use prevention
Balanced approach
LESS AVAILABILTY OF DRUG IN THE ENVIRONMENT
LESS DEMAND AND USE OF DRUGS

WHERE to do prevention?

Family

School

Workplace

Internet (V.I.)

Community

- Media
- Health care system
- Social system
- Environment (street, square, district)

WHEN to do selective prevention in lifespan?

Mother and father	Pregnancy (prenatal)	Early childhood	Middle childhood	Adolescents	Emerging adulthood

Parenting skills
Family oriented skill training and therapy

Maternal care for prevention of use of substances, alcohol and tabacco (use increases the addiction risk in children)

Social skills
Health behaviour
Normative education
Early detection of vulnerability factors

Increase Risk perception
Resilience factors
Early detection of initial drug use

Solidarity Consortium for prevention strategies and intervention of drug use

Solidarity

- Solidarity is a need, not only a moral obligation
- Is a positive value for those who believe in the future
- Is the basic principle of a smart and human globalization

Intent of the Solidarity Consortium for prevention

- To promote international cooperation and coordination of intent
- Make "a real Partnership" for the future with all countries
- Share strategy, materials, methods, good practices (Scientific oriented) in the prevention field
- Without profit intent

But…. There is not unic prevention model

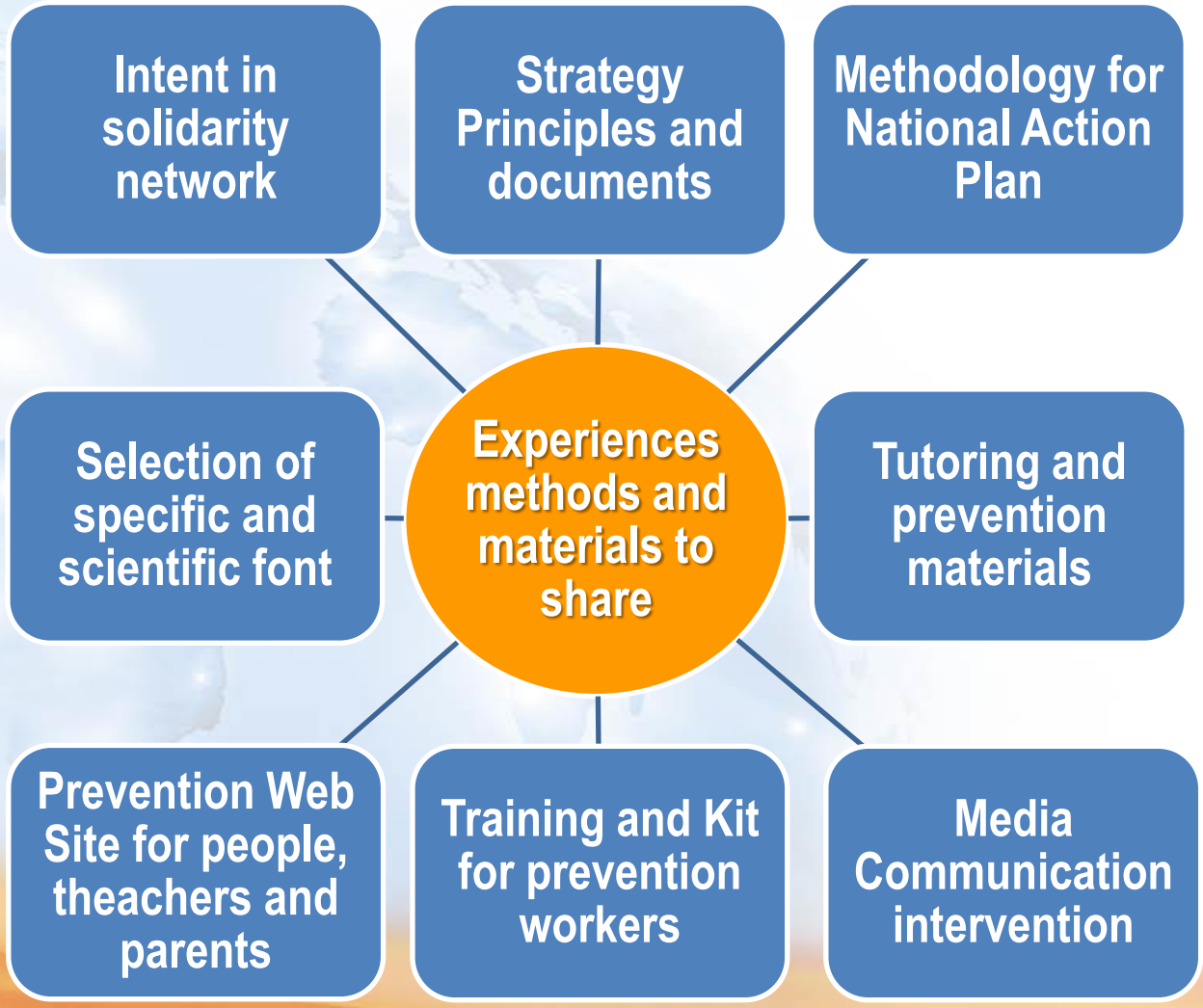
- There does not exist a "single" solution for all countries, but the "right" solution for each situation, according to different environmental conditions, cultures, sustainability, evolution of the phenomenon, health systems and social structures and the presence of criminal organizations.

Why international cooperation?

Because the Drug trafficking has no borders

for this reason also there should be no borders for prevention

With Partecipation we can share….



The most important principle for sharing and coordination:

1. Strategy
2. Action Plan
3. Guide Line and standard
4. Assessment System

Underline the importance of cooperation to:

1. Promote good practice and virtuous path

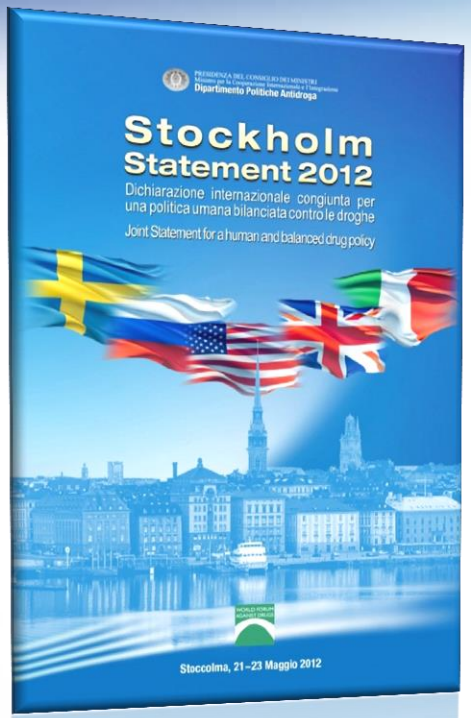
2. Increase the effectiveness of the prevention interventions

A first initiative:

Joint Statement

For a human and balanced drug policy

Stockohlm 20 May 2012



Maria Larsson
Minister for Children and the Elderly
Ministry of Health and Social Affairs, Sweden

Viktor Ivanov
Director, Federal Narcotic Service of Russian Federation

Gus Jaspert
Deputy Director at the Home Office, United Kingdom

Gil Kerlikowske
Director of National Office of Drug Control Policy, USA

Giovanni Serpelloni
Head of Department for Antidrugs Policies, Italy

Substance abuse and addiction

	Primary pathology	Incremental risks associated with primary pathology											
	Substance abuse, addiction	Acute Mortality from Overdose or systemic complications	Accidents: - On the road - At work - At home	Acquisition of infection: - HIV - Hepatitis - STD - TB	Transmission of infection: - HIV - Hepatitis - STD - TB	Development during illness of infections not previously diagnosed	Manifestation and/or worsening of Psychiatric Pathologies	Cardiovascular pathologies: - stroke - acute myocardial infarction	Criminal behaviour and legal consequences: - warnings - arrests - imprisonment	Subjection to abuse: - Physical - Sexual - Psychological	Prostitution	Loss of potential for personal development	Stigmatization and alienation
Preventive and risk-reduction measures (PPC)	- Providing information and education early on - Early outreach programs for drug addicts not already in treatment - Early diagnosis for young casual users (Early detection for Early Intervention)	- Targeted information, education, and communication (IEC) on risk and prevention factors - Training for practical, preventive skills for addicts and relatives - Naloxone distribution - Management of release from prison and from therapeutic communities - Early admission to and regular attendance at addiction therapies	- Targeted information, education, and communication (IEC) on risk and prevention factors - Periodic toxicology tests on the road and at the workplace - Early admission to and regular attendance at addiction replacement therapies	- Targeted information, education, and communication (IEC) on risk and prevention factors - Distribution and encouraged use of sterile injection equipment and condoms - Hepatitis vaccinations - Early admission to and regular attendance at addiction therapies	- Targeted information, education, and communication (IEC) on risk and prevention factors - Early diagnosis by means of early and periodic testing for infection in addicts and partners - Active outreach interventions through Contact tracing and partner notification (voluntary and anonymous) - Early, targeted etiologic therapies	- Early diagnosis by means of early and periodic testing for infection in addicts and partners - Early admission to antiretroviral therapies - Regular clinical monitoring	- Early diagnosis from a specialist - Early admission to and regular attendance at therapies for addition and psychiatric pathologies	- Early diagnosis from a specialist - Early admission to and regular attendance at therapies for addition and cardiovascular pathologies	- Targeted early information, education, and communication (IEC)	- Targeted early information, education, and communication (IEC) - Removal from places of and conditions for risk	- Targeted programs against female trafficking and sexual exploitation - Early diagnosis by means of early and periodic testing for infection - Distribution and encouraged use of condoms	- Early diagnosis of substance abuse from a specialist - Early admission to and regular attendance at addiction therapies	- Early diagnosis of substance abuse from a specialist - Early admission to and regular attendance at addiction therapies - Support in defence of fundamental rights
Therapeutic-rehabilitative measures	- Early pharmacological or integrated residential treatments for addiction with rehabilitation measures aimed at reintegration	- Use of Naloxone and emergency treatments - Ongoing offer of admission to addiction treatment with transportation to the services	- Targeted post-accident treatment, integrated with addiction treatment	- Early antiretroviral therapy for post-incident probable contamination, (Post-exposure prophylaxis - PEP)	- Early, targeted etiologic therapies (reduction of viral load and transmissibility), integrated with addiction treatment	- Early, targeted etiologic therapies (reduction of viral load, recovery of immunity), integrated with addiction treatment	- Early, regular psychiatric therapy, integrated with addiction treatment	- Early, targeted therapies, integrated with addiction treatment	- Addiction and rehabilitation therapies	- Early fulfilment and duration of alternative measures to imprisonment with admission to therapeutic-rehabilitative programs	- Early pharmacological or integrated residential treatments for addiction with rehabilitation measures aimed at reintegration	- Early pharmacological or integrated residential treatments for addiction with rehabilitation measures aimed at reintegration	- Early pharmacological or integrated residential treatments for addiction with rehabilitation measures aimed at reintegration

(DPA *Dipartimento Politiche Antidroga*, or Anti-drug Policy Department)

..That conclude my presentation today Thank you for your attention

Giovanni Serpelloni – M.D.
Head Antidrugs Policy Department

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