

Universal Prevention of Suicide, Psychiatric Disorders, and Child Abuse

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15th ANNUAL NEVADA STATE
CHILD ABUSE PREVENTION AND
SAFETY CONFERENCE, Reno,
Nevada • June 15, 2016



My conflicts of interests...

I own 100% PAXIS Institute, which designs, tests, and sells scientifically proven strategies to improve the wellbeing individuals, families, and communities. We intend to to make money selling prevention. No apologies.



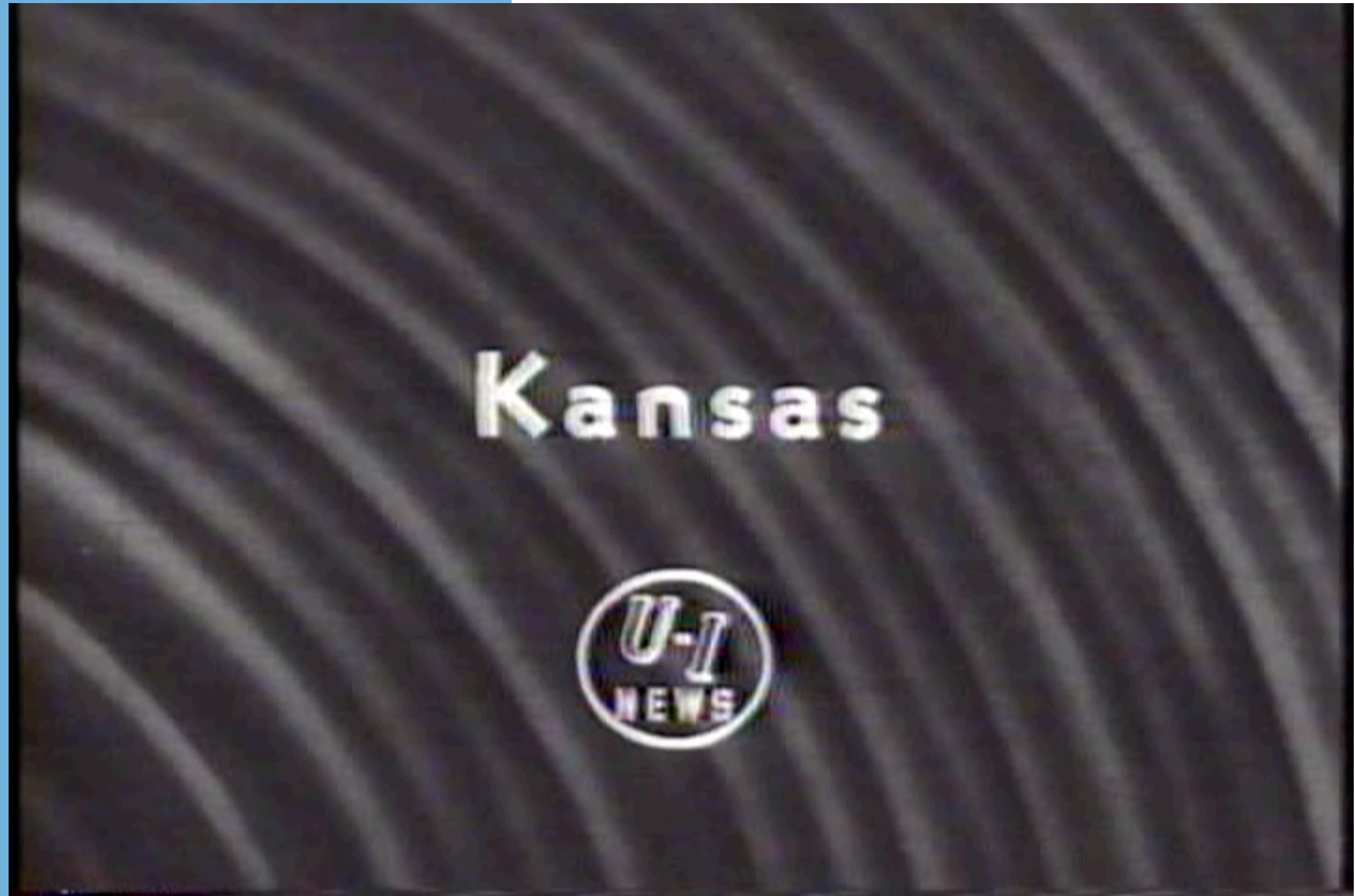


If the Polio Epidemic of the 1950s happened today

There would be 6,000 deaths and 120,000 cases. How would America respond?



Every part of
America &
Other
Developed
Countries
mobilized to
protect the
children



Click video to play

Was the polio prevention effort worth it?



EVALUATION OF 1954 FIELD TRIAL OF POLIOMYELITIS VACCINE

THOMAS FRANCIS, JR., M.D., ROBERT F. KORN, M.D., ROBERT B. VOIGHT, B.S., MORTON BOISEN, B.A., JOHN A. NAPIER, FAY M. HEMPHILL, PH.D. AND EVA TOLCHINSKY

Poliomyelitis Vaccine Evaluation Center, University of Michigan

ABSTRACT OF SUMMARY REPORT

by Robert F. Korn

During the spring of 1954 an extensive Field Trial of the prophylactic effectiveness of formalin-inactivated poliomyelitis vaccine, as developed by Dr. Jonas Salk and his associates, was initiated by the National Foundation for Infantile Paralysis.

The Poliomyelitis Vaccine Evaluation Center was established at the University of Michigan for the purpose of impartially collating and analyzing data collected through the combined efforts of many thousands of health-department workers, practicing physicians, physical therapists and laboratory people scattered through the 211 participating study areas in 44 states.

The study design was dictated by both scientific and practical considerations, necessary in a project of such scope and dependent on the good will and abilities of so many people of varying capacity. They involved the organization and execution of the vaccination clinic program, the maintenance of detailed and accurate records, as well as the thorough investigation, according to a detailed plan, of each reported case of poliomyelitis in the area. Originally, it was deemed impractical to establish a strict placebo control experiment, with the complex administrative problem of giving 3 injections in sequence to each child, without knowing the nature of the material being used. Thus, all states were invited to participate on the basis of administering vaccine to volunteers in the 2nd grade of school. Later the poliomyelitis incidence in these children would be compared with that in the uninoculated 1st and 3rd grade population. This study plan had certain scientific limitations, related primarily to possible bias, at all levels, in the follow-up of study children. Obviously it was essential that non-vaccination children be studied with the same degree of care as the vaccinated so that the discovery and diagnosis of cases of poliomyelitis in test and control groups would be strictly comparable. In order to achieve such an impartial comparison it was

essential to introduce a so-called placebo control study into the existing plan. This type of study was carried out in 84 areas of 11 states signifying the interest in doing so (Table 1a). In 127 areas of 33 states the original, or observed control, study was carried out (Table 1b). The specific study areas were selected because of their consistently high poliomyelitis incidence during the past 5 years.

The tremendous clinic program was accomplished according to plan during April, May and June. In placebo control areas (Table 1a) the study population (1st, 2nd and 3rd grade) included 749,236 children; 455,474 (or 60.8%) requested participation; 200,745 (26.8%) received 3 injections of vaccine, and 201,229 (26.9%) 3 injections of placebo, an identical material which, however, contained no poliomyelitis virus or monkey kidney protein. In observed control areas (Table 1b) the study population totalled 1,080,680 children in the first 3 grades; 221,998 2nd-grade children (20.5% of the total) received 3 doses of vaccine.

The first problem of evaluation was that of collecting and verifying basic information on each of the 1,829,996 children in the study population. These data, which included the name, address, age, sex, history of polio or other crippling condition, participation status and dates of vaccination, if any, for each child, were transferred to punch cards, and tables describing the population were prepared which would serve as the denominators over which the discovered cases of polio would be placed for the determination of polio attack rates in vaccinated vs. control and in other segments of the population. During December 1954 an interview survey was conducted on 1,100 study families in 10 states in order to gain more insight into the differences existing between participants and non-participants (p. 13). This demonstrated striking differences in income level, community activity, health conveniences, education level, etc., which in turn assisted the center in deciding

Polio Vaccine Success

Salk Vaccine Tested



Dr. James Lewis, right, research associate on the Salk polio development program at the University of Pittsburgh, injects vaccine into a monkey to determine if it is safe for use on humans, as all vaccine is so tested before being used. Tony Penco, left, a laboratory technician, aids Dr. Lewis. A report on the success or failure of the Salk polio vaccine will be made at Ann Arbor, Mich., on April 12. (AP Wirephoto)

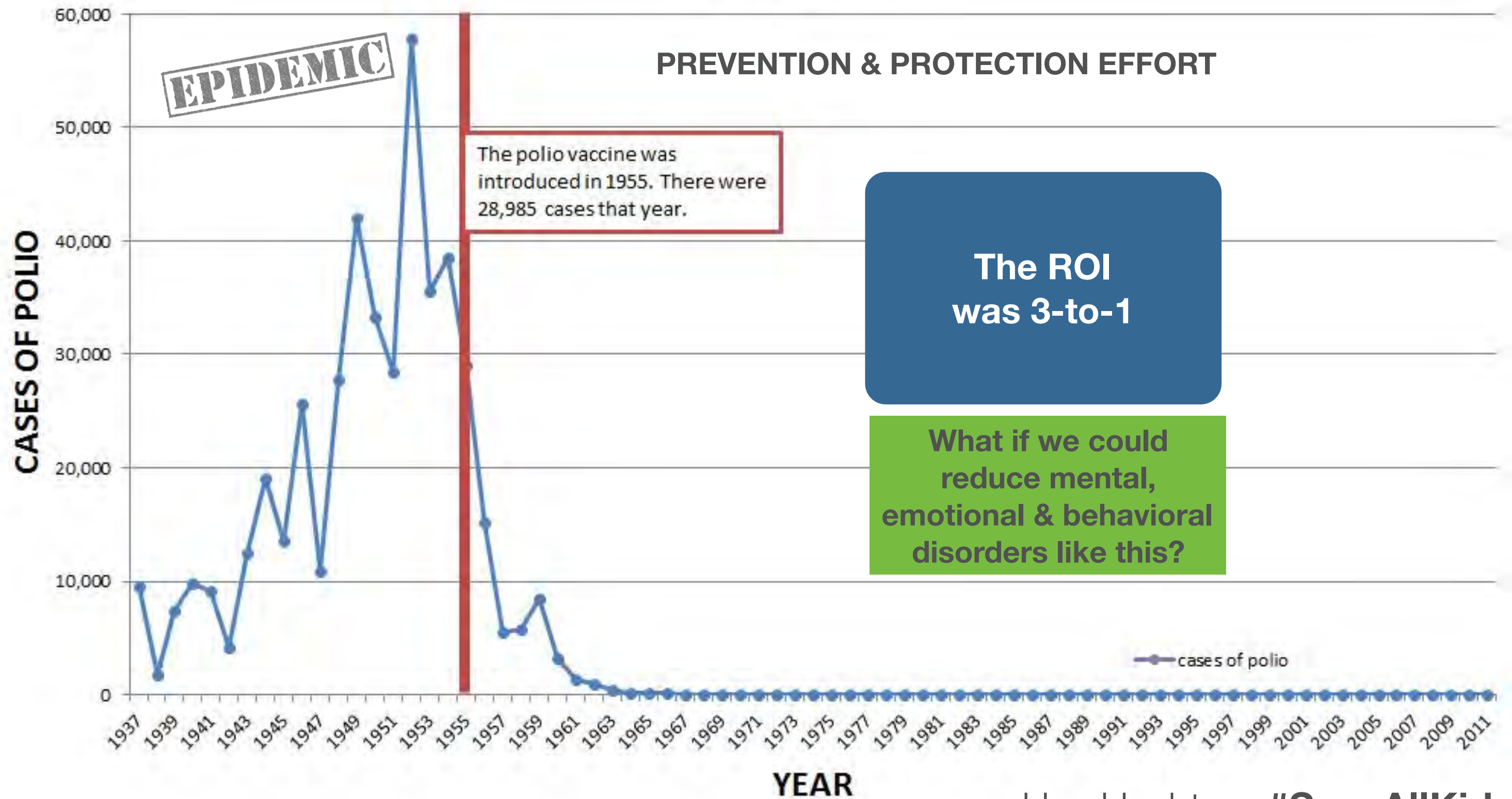
Safe, Effective, and Potent Is Official Report, with Important Results Against Bulbar Variety

Weather
Local for 24 hours ending 8 a.m. Tuesday: High, 44; low, 28. Precipitation, .09 of an inch at Sugar factory; .13 of an inch at Public Service.
Colorado—Livestock and highway warning northeast Tuesday: snow in northeast, gradually diminishing west Tuesday, but strong northerly winds continuing to drift and blow till Tuesday night; scattered light snow southeast ending Tuesday; partly cloudy west Tuesday, with scattered snows mountains; partly cloudy Tuesday night and Wednesday, with snow flurries mountains; local blowing dust and strong winds southeast Tuesday, diminishing Tuesday night; colder east and in San Luis Valley Tuesday, southeast Tuesday night; rising temperatures Wednesday; low Tuesday night 8-10 mountains; 10-20 northwest; 20-30 southeast; high Wednesday 45-55.
Wyoming—Heavy snow southeast corner ending Tuesday afternoon; strong winds blowing snow southwest Tuesday and Tuesday night; otherwise partly cloudy.

By ALTON L. BLAKESLEE
AP Science Reporter.
ANN ARBOR, Mich. (AP) — The Salk polio vaccine is safe, effective and potent. It was officially announced Monday.
The vaccine was found 80 to 90 per cent effective in preventing paralytic polio in tests last year, anxious parents were told Monday by Dr. Thomas Francis Jr. of the University of Michigan.
Dr. Jonas E. Salk of Pittsburgh, immediately declared he is sure the vaccine is potentially almost 100 per cent effective and can bring complete triumph over polio and its lieutenants of terror and tragedy.
Extremely Successful Against Bulbar Type
Dr. Francis' official report declared the vaccine had produced an "extremely successful effect" among children with bulbar polio, the most dangerous type.
There is no doubt that children now can be vaccinated successfully to end the threat of polio and the anxiety it causes every year.
Vaccine Incredibly Safe



Polio Cases 1937-2011



Use Hashtag: **#SaveAllKids**



National Prevention Science Coalition to Improve Lives

Whose lives are at risk
from mental, emotional,
and behavioral disorders?

Congressional Briefing; December 3, 2014

<http://bit.ly/EmbryBrief>

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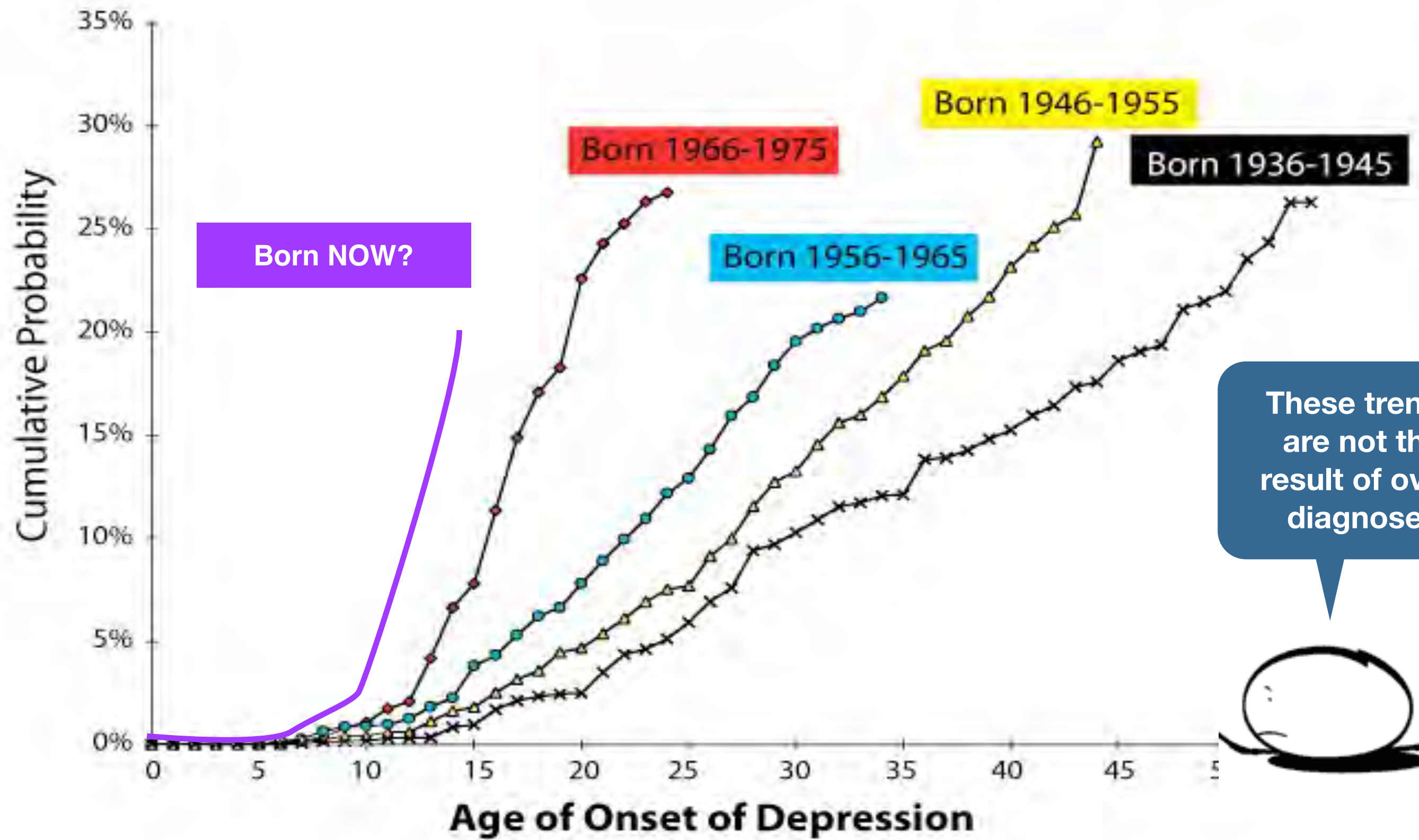
Your Circles of Concern for the Future of Our Children, Youth and Young People

Please check ☒ which circles are your concerns. And you may add other circles of concern:

<input type="checkbox"/> Better Reading Skills	<input type="checkbox"/> Better Math Skills	<input type="checkbox"/> Better Writing Skills	<input type="checkbox"/> Better Science Skills
<input type="checkbox"/> More Time to Teach	<input type="checkbox"/> Less Teacher Stress	<input type="checkbox"/> Less Bullying	<input type="checkbox"/> More Community Support
<input type="checkbox"/> Less Need for Special ED	<input type="checkbox"/> Higher % of HS Grads	<input type="checkbox"/> Higher University Entry	<input type="checkbox"/> Lower Rates of Disparities
<input type="checkbox"/> Lower Income Disparities	<input type="checkbox"/> Lower Violent Crime	<input type="checkbox"/> Less Early Sex	<input type="checkbox"/> Lower STD's
<input type="checkbox"/> Lower Alcohol Abuse	<input type="checkbox"/> Lower Tobacco Addiction	<input type="checkbox"/> Less Opiate Addictions	<input type="checkbox"/> Less Stimulant Abuse

<input checked="" type="checkbox"/> Fewer Lifetime Disabilities	<input type="checkbox"/> Fewer Psychiatric Disorders	<input type="checkbox"/> Fewer Murders	<input type="checkbox"/> Fewer Suicides
<input type="checkbox"/> Better Family Life	<input type="checkbox"/> Better Tax Base	<input type="checkbox"/> More Productive Adults	<input type="checkbox"/> Fewer Prison Inmates
<input type="checkbox"/> Fewer Abused Children	<input type="checkbox"/> Fewer Kids w/ Disabilities	<input type="checkbox"/> Lower Community Crime	<input type="checkbox"/> Lower Taxes
<input type="checkbox"/> Fewer Adverse Childhood Experiences (ACEs)	<input type="checkbox"/> Having More Hope for the Future	<input type="checkbox"/> Safer Retirements Incomes	<input type="checkbox"/> Safer Neighborhoods & Communities
<input type="checkbox"/> Better Economy	<input type="checkbox"/> Better National Security	<input type="checkbox"/> Your Idea?	<input type="checkbox"/> Your Idea?

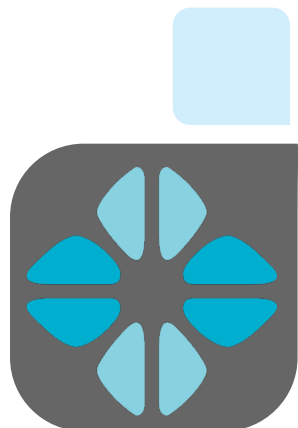




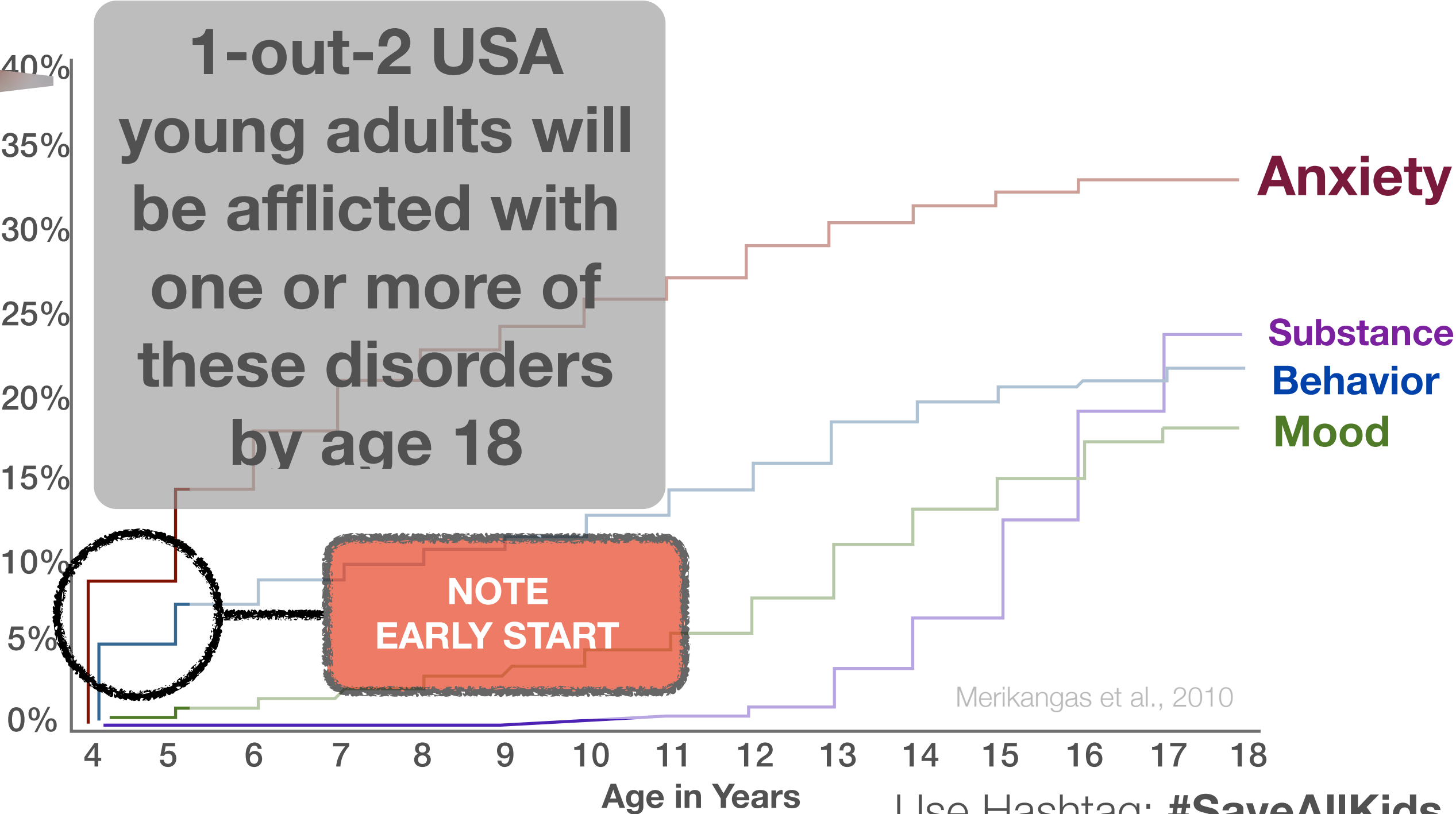
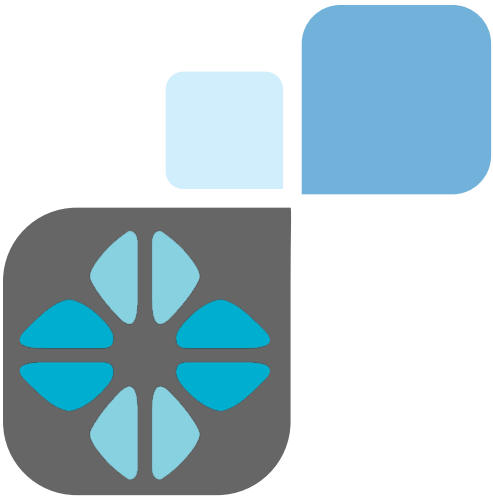
These trends
are not the
result of over-
diagnoses



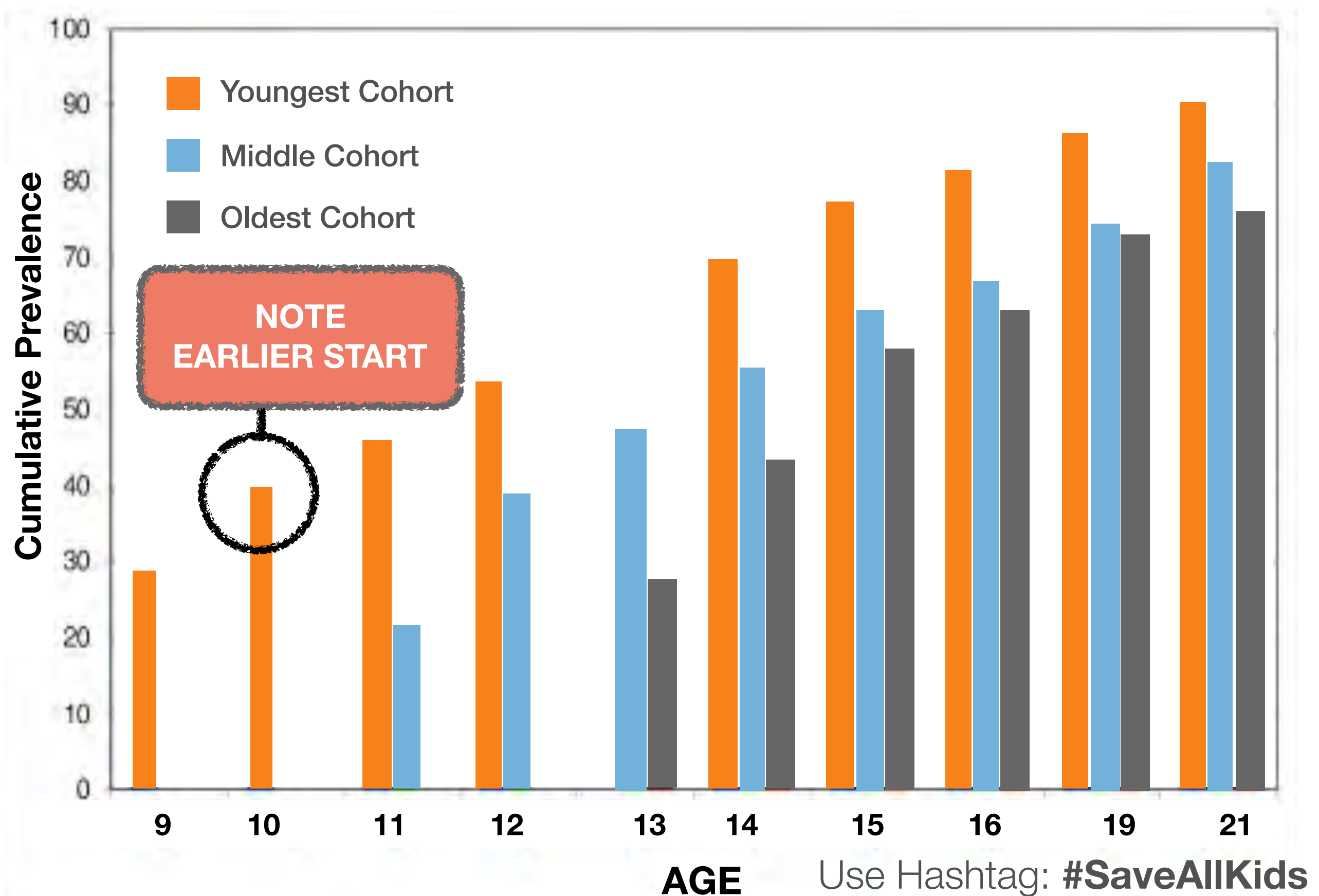
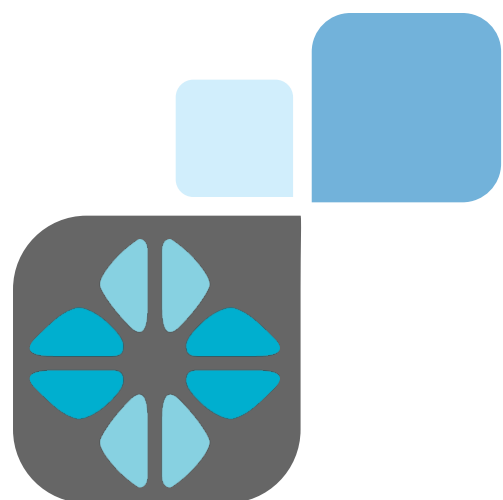
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Cumulative Lifetime Prevalence of Disorders in US Adolescents (N=10,123)



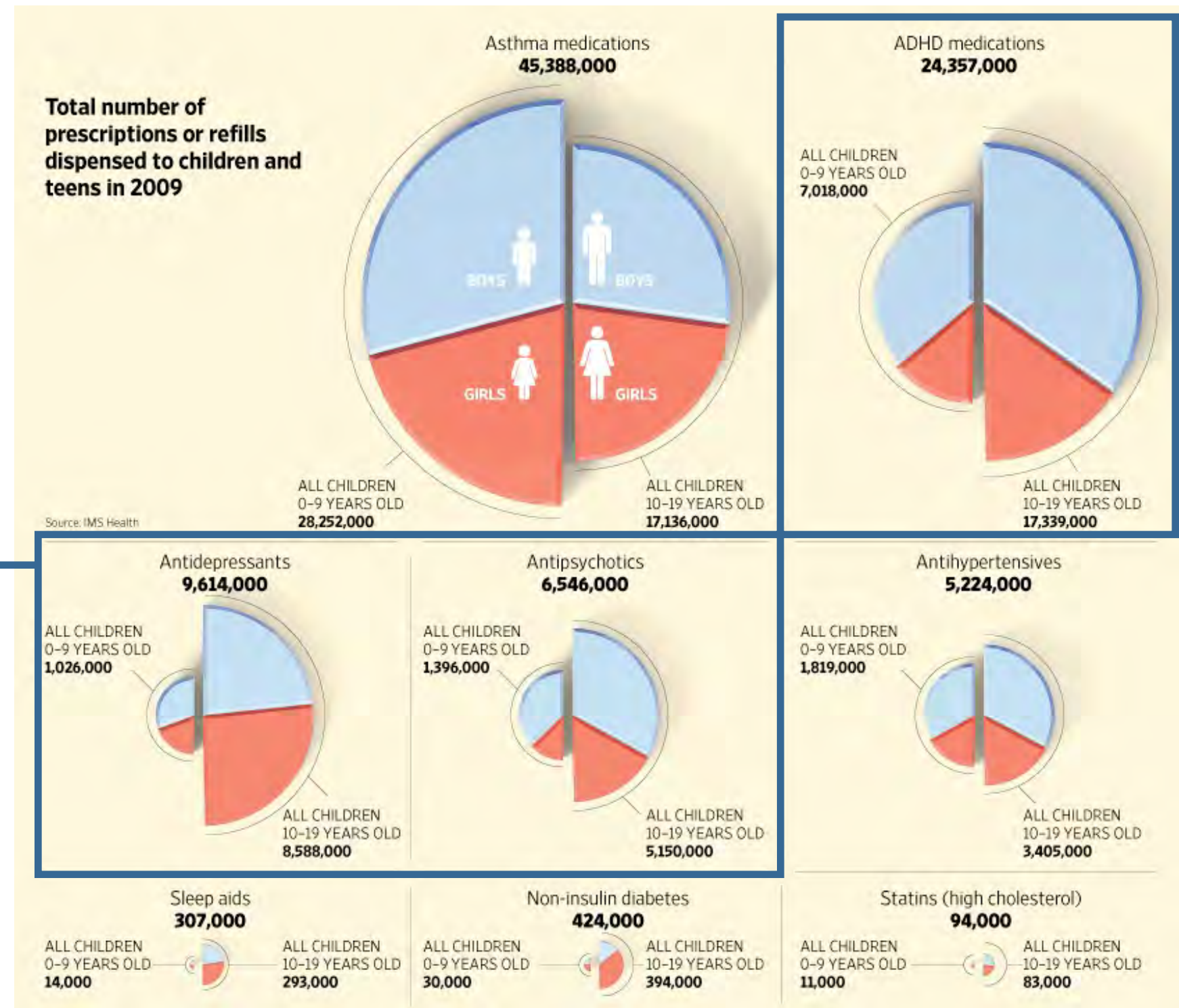
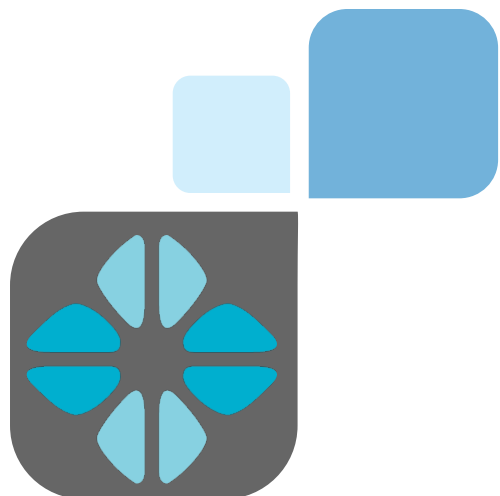
Cumulative prevalence of psychiatric disorders by young adulthood: a prospective cohort analysis from the Great Smoky Mountains Study.



The US had 75 million children and teens 2009

40.4 million kids had one psychotropic med in 2009

Wall Street
Journal,
12-28-2010



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Cost \$77.9 billion in 2012...

Most of this increase is attributable to an increase in the number of children in special education rather than to an increase in per-pupil costs.

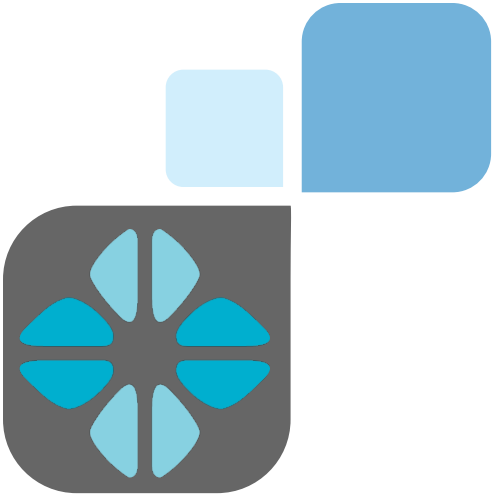
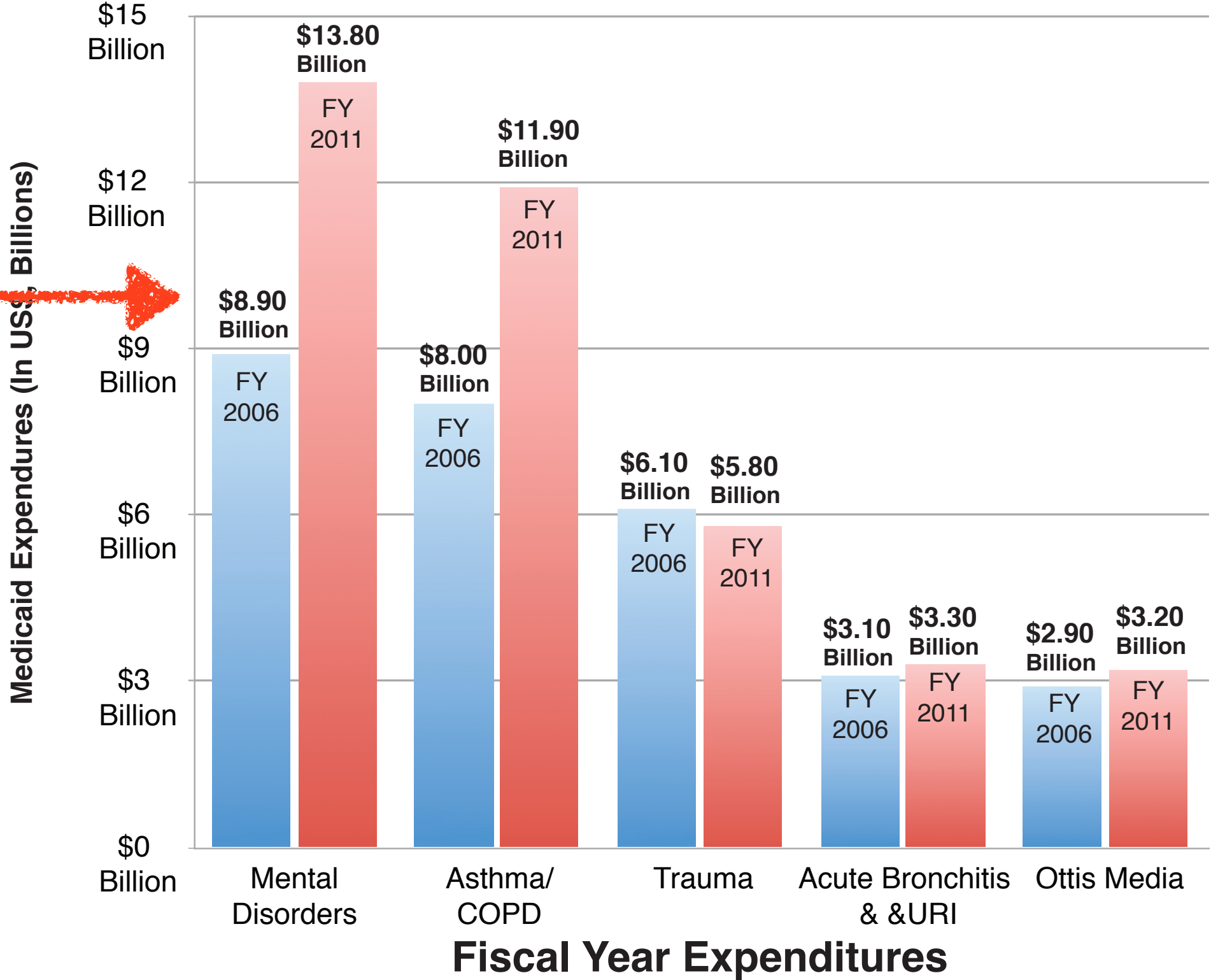
Aron, L., & Loprest, P. (2012). Disability and the Education System Children with Disabilities, 22(1), 97-122.





The cost of Mental Disorders is increasing \$1 billion per year

Medicaid Expenditures for the Five Most Costly Conditions in Children



Source: Center for Financing, Access, and Cost Trends, Agency for HealthCare Research and Quality, 2006, 2011



SAT Scores Fall to Lowest Level in 10 Years...

There's no obvious reason why average SAT scores continue to fall, but continue to fall they do...

ENTREPRENEUR MAGAZINE
SEPTEMBER 03, 2015



So what?

Nevada has 75,000 young people between the ages of 10 to 19.

At least 12,700 will have a teen depression...

With collective lost lifetime income of... **\$3.8 billion loss**



Adolescent Depression Lowers Later-Life Earning Power by an average of \$300K

The numbers are real and human



Three (3) fully loaded Boeing 747 with adults and one (1) with children will land every day in Washington, DC to claim lifetime disabilities for mental, emotional, behavioral & related physical disorders...

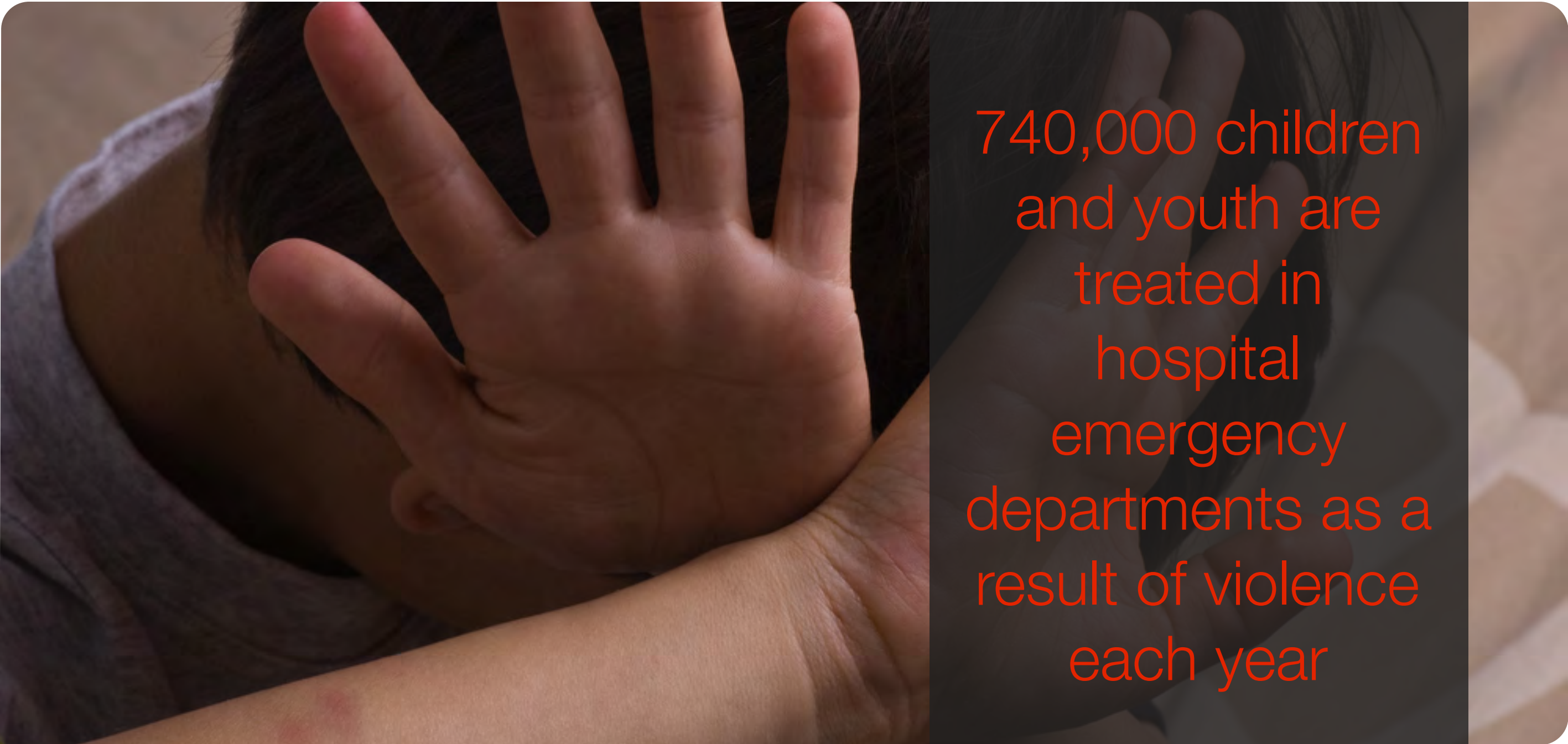


38,000

Deaths

708,000 Self
Inflicted Injuries
at ERs



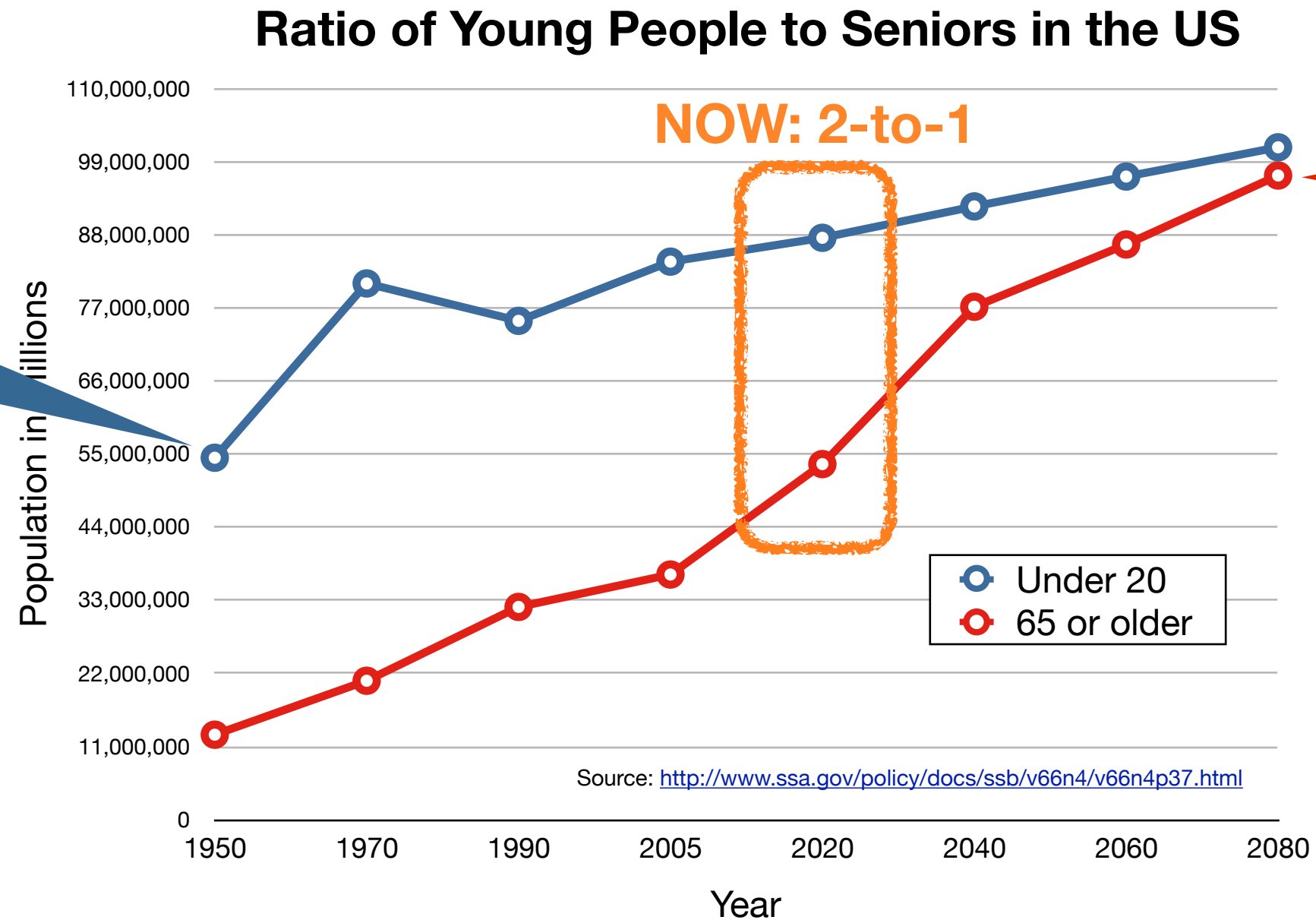


740,000 children
and youth are
treated in
hospital
emergency
departments as a
result of violence
each year

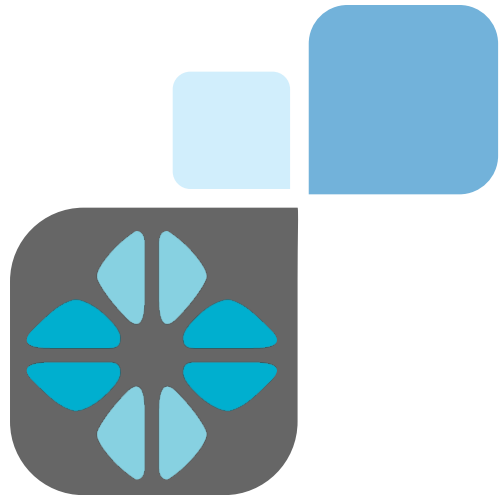


Generation Squeeze: Our Nation's Young People are Increasing, but Not Fast Enough to Support Our Seniors


In 1950,
Five children to 1 senior



When current
teens retire,
there will be
one child to
one senior



Use Hashtag: **#SaveAllKids**



Nearly 75 percent of the nation's 17- to 24-year-olds are ineligible for service for:



- Medical/physical problems, *35 percent.*
- Illegal drug use, *18 percent.*
- Mental Category V (the lowest 10 percent of the population), *9 percent.*
- Too many dependents under age 18, *6 percent.*
- Criminal record, *5 percent.*





What should we do to save the future?

Pretend, you are the governor.

Pretend, you are a legislator.

Pretend, you are a citizen invested in the future.





Changing outcomes rapidly requires coordinated efforts across silos



The Critical Role of Nurturing Environments for Promoting Human Well-Being

Anthony Biglan
Brian R. Flay
Dennis D. Embry
Irwin N. Sandler

Oregon Research Institute
Oregon State University
PAXIS Institute
Arizona State University

The recent Institute of Medicine report on prevention (National Research Council & Institute of Medicine, 2009) noted the substantial interrelationship among mental, emotional, and behavioral disorders and pointed out that, to a great extent, these problems stem from a set of common conditions. However, despite the evidence, current research and practice continue to deal with the prevention of mental, emotional, and behavioral disorders as if they are unrelated and each stems from different conditions. This article proposes a framework that could accelerate progress in preventing these problems. Environments that foster successful development and prevent the development of psychological and behavioral problems are usefully characterized as nurturing environments. First, these environments minimize biologically and psychologically toxic events. Second, they teach, promote, and richly reinforce prosocial behavior, including self-regulatory behaviors and all of the skills needed to become productive adult members of society. Third, they monitor and limit opportunities for problem behavior. Fourth, they foster psychological flexibility—the ability to be mindful of one's thoughts and feelings and to act in the service of one's values even when one's thoughts and feelings discourage taking valued action. We review evidence to support this synthesis and describe the kind of public health movement that could increase the prevalence of nurturing environments and thereby contribute to the prevention of most mental, emotional, and behavioral disorders. This article is one of three in a special section (see also Muñoz Beardslee, & Leykin, 2012; Yoshikawa, Aber, & Beardslee, 2012) representing an elaboration on a theme for prevention science developed by the 2009 report of the National Research Council and Institute of Medicine.

Keywords: prevention, nurturing environments, development, public health, problem behavior

The 2009 Institute of Medicine report on prevention (National Research Council & Institute of Medicine [NRC & IOM], 2009) documented the substantial accumulation of knowledge on preventing the most common and costly psychological and behavioral disorders. The report reviewed how and why psychological and behavioral disorders develop and discussed numerous programs, policies, and practices to prevent these problems.

The next big challenge is to translate this knowledge into significant reductions in the incidence and prevalence of multiple disorders.

Doing so requires us to accept two other conclusions of the report: Psychological and behavioral disorders and related problems co-occur (e.g., Biglan, Brennan, Foster, & Holder, 2004; Donovan, Jessor, & Costa, 1993; Flay, 2002), and these problems stem largely from the same conditions (Biglan et al., 2004; Flay, Snyder, & Petraitis,

Editor's note. This article is one of three in a special section presented in this issue of the *American Psychologist* (May–June 2012) representing an elaboration on an important theme for prevention science developed by the landmark report of the National Research Council and Institute of Medicine (NRC & IOM, 2009). That report summarized the impressive progress in prevention research that has occurred over the past two decades with children and youth. The report also presented recommendations for the next generation of research and policy initiatives to translate this progress into true improvements in the mental health of America's children and youth. One theme in the report concerns the power of positive aspects of the social environment to promote positive development and to prevent the development of disorder. The current article develops a coherent, empirically based, theoretical framework for conceptualizing the positive aspects of the social environment, which the authors have labeled “nurturing environments.” The other articles in this special section elaborate on two other themes in the NRC & IOM report, one of which concerns the salient role of poverty as a pervasive risk factor (Yoshikawa, Aber, & Beardslee, 2012) and the other of which concerns the potential for preventing the incidence of depression, a major mental disorder (Muñoz, Beardslee, & Leykin, 2012).

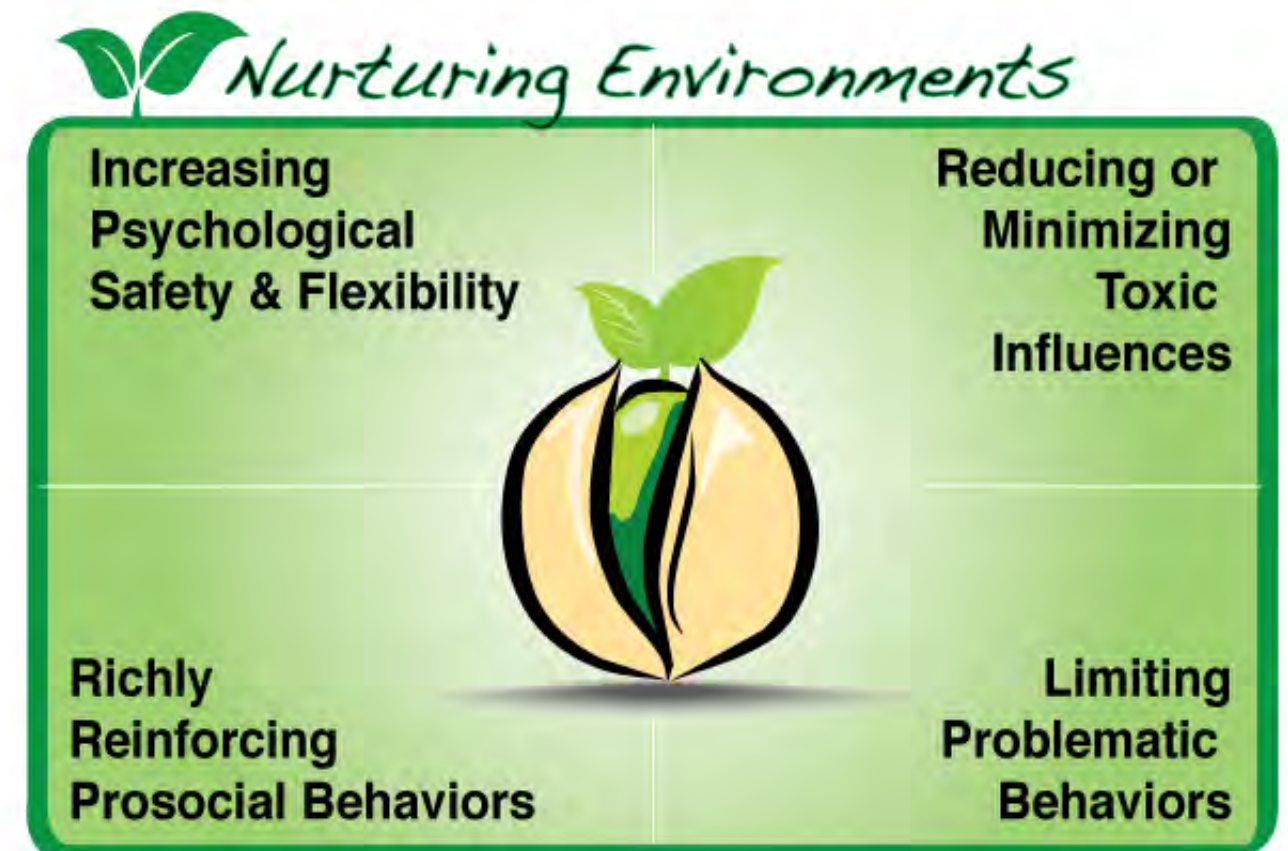
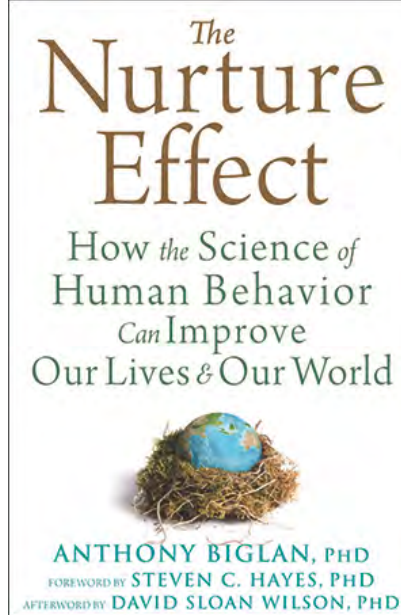
Authors' note. Anthony Biglan, Promise Neighborhoods Research Consortium, Oregon Research Institute, Eugene, Oregon; Brian R. Flay, College of Public Health and Human Sciences, Oregon State University; Dennis D. Embry, PAXIS Institute, Tucson, Arizona; Irwin N. Sandler, Department of Psychology, Arizona State University.

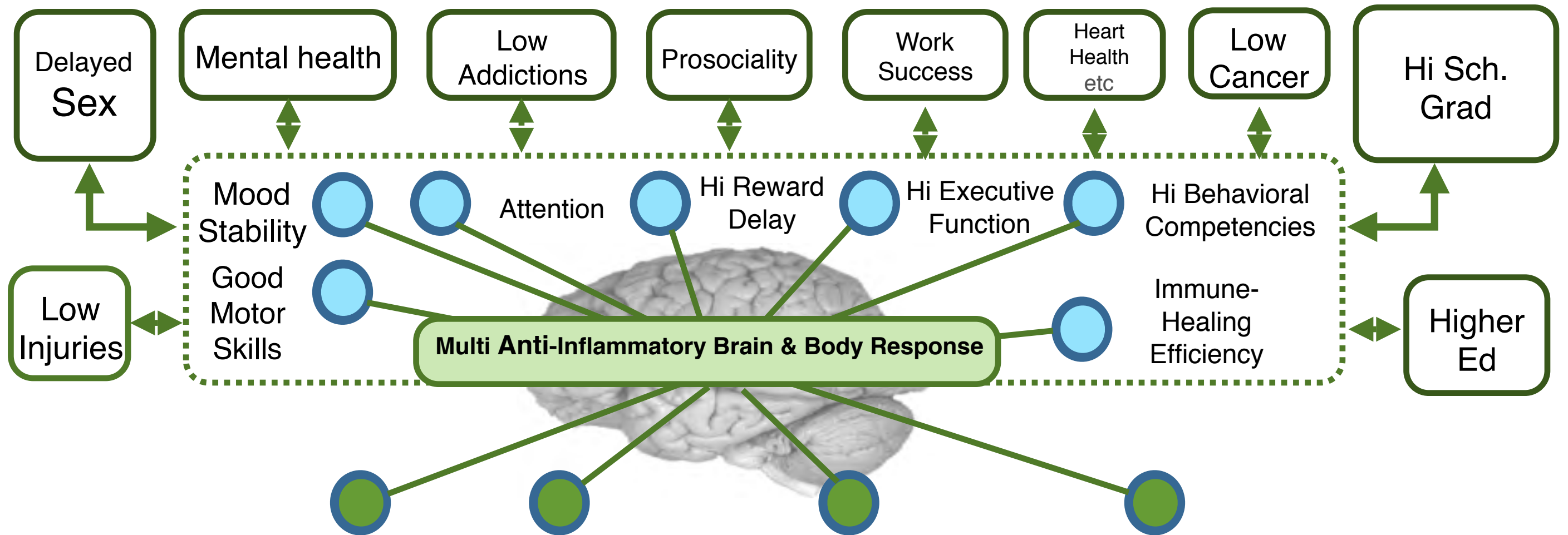
Grants from the National Institute on Drug Abuse (DA028946, DA018760, and DA026874), the National Institute of Child Health and Human Development (HD060922), and the National Institute of Mental Health (P30 MH068685) supported the work on this article.

We thank Christine Cody for her editorial input and give special thanks to Edward Maibach for his valuable feedback on earlier versions of this article.

Full disclosure of interests: Brian R. Flay's spouse owns positive Action, Inc. Dennis D. Embry receives salary, royalties, and training and consulting fees related to the Good Behavior Game and evidence-based kernels, through PAXIS Institute and Simple Gifts, Inc.

Correspondence concerning this article should be addressed to Anthony Biglan, Oregon Research Institute, 1715 Franklin Boulevard, Eugene, OR 97403-1983. E-mail: tony@ori.org





Multiple Behavioral Vaccines Protect the Futures of ALL Children, Youth and Adults

Reinforcement
more for prosocial
behaviors

Antecedents
cue prosocial
behaviors

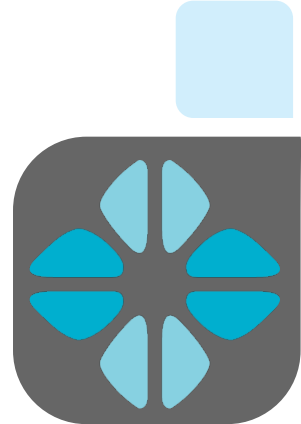
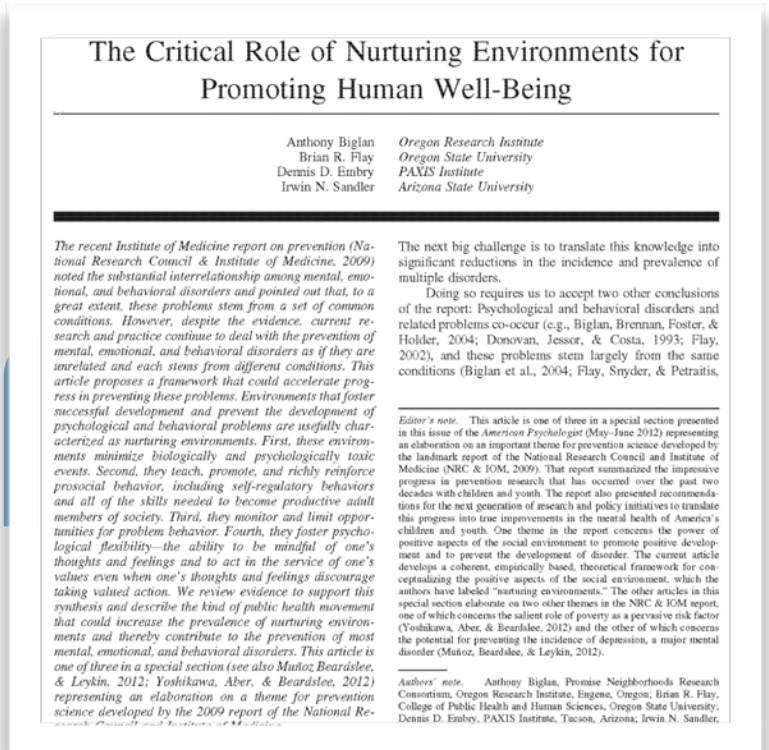
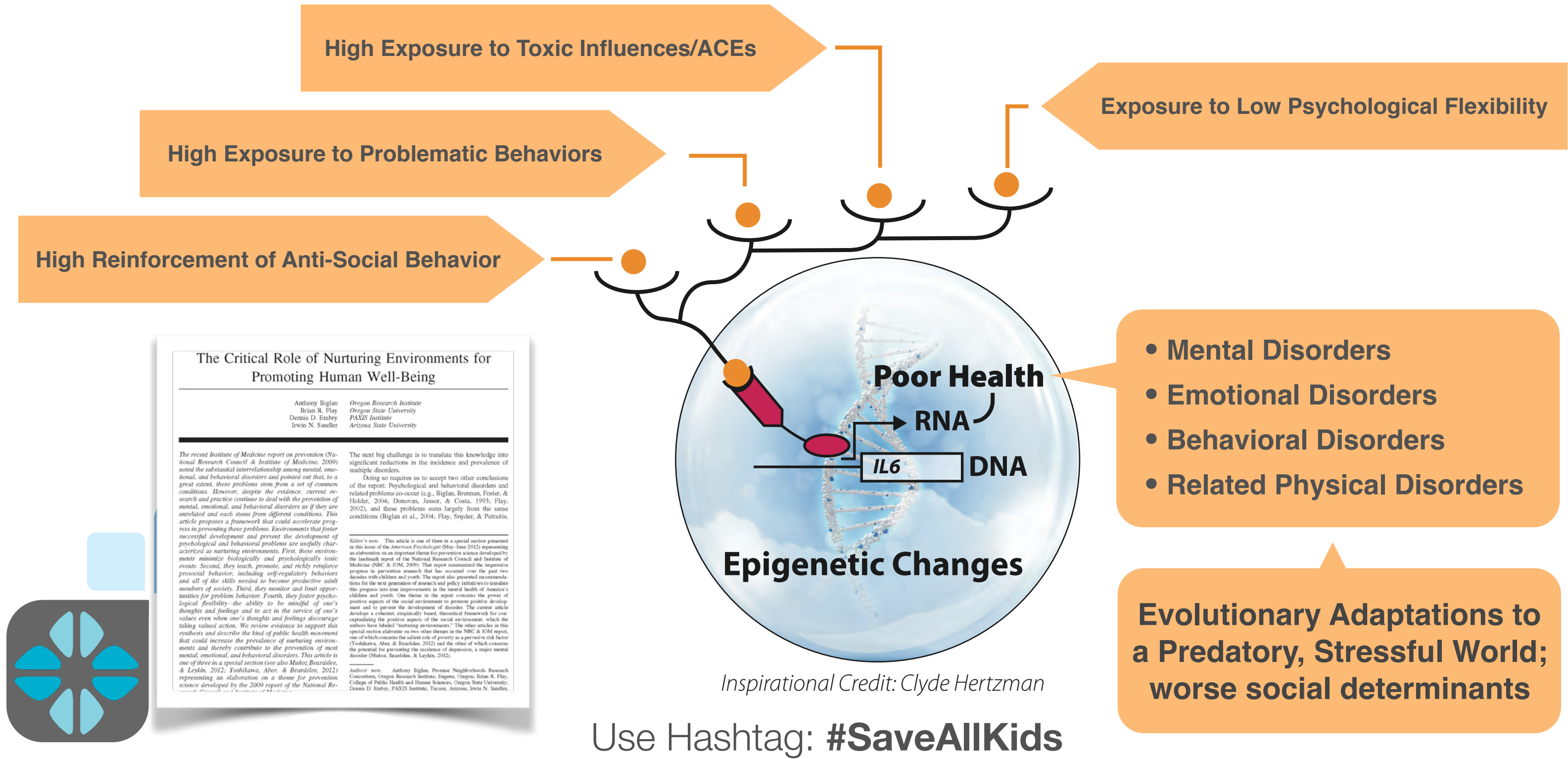
Physiological
influences trigger
protective biological
mechanisms

Verbal Relations
occasion perceived
safety and
flexible minds

Conditions That Protect and Prevent



Common set of conditions producing these negative trends...



Preventing Mental, Emotional, and Behavioral Disorders Among Young People

Progress and Possibilities

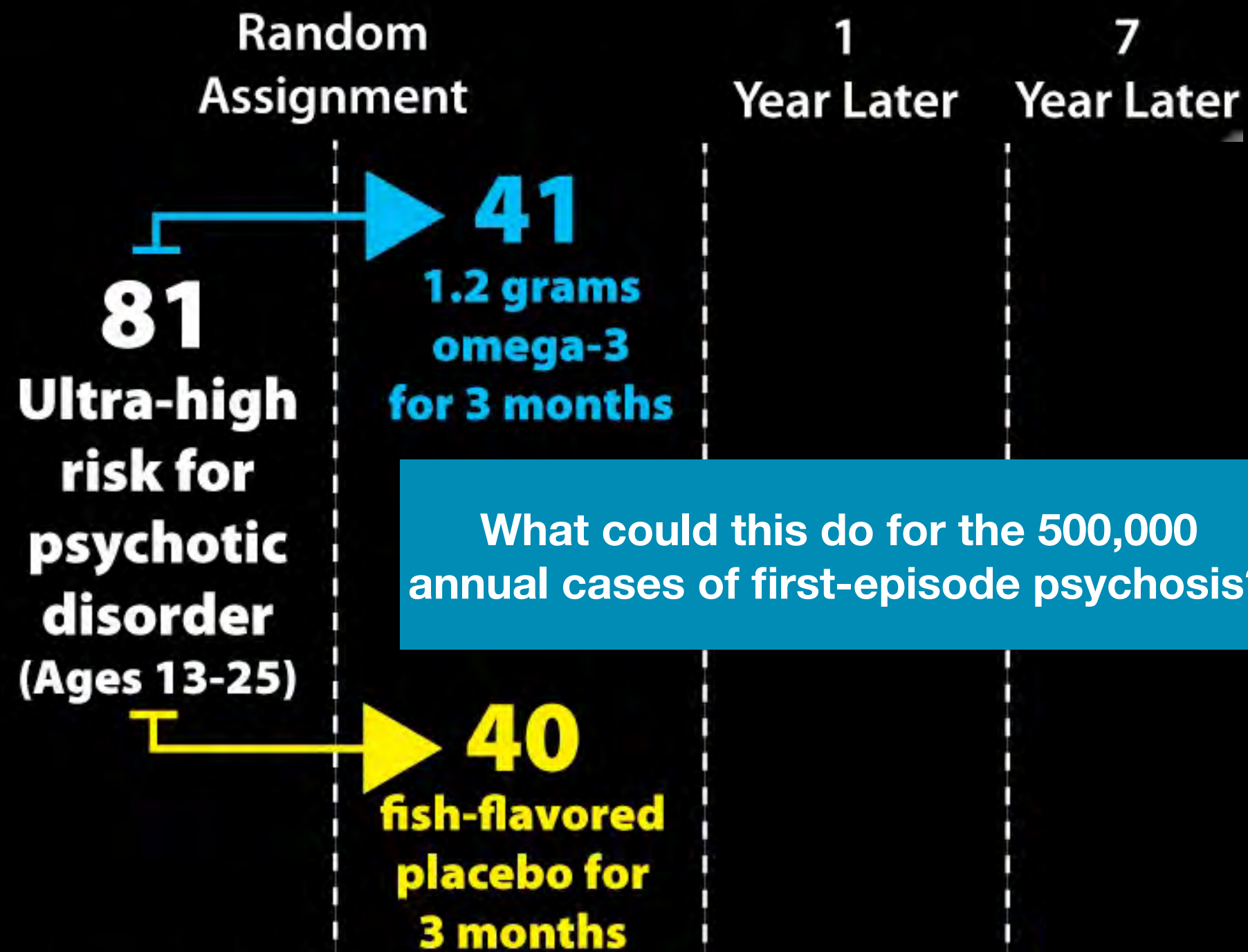


Now what?

We have more evidence for successfully preventing or protecting against mental, emotional, behavioral and related physical disorders than we did by comparison to the initial positive antibody results for the Salk Vaccine in 1954.

Give us a @#\$!%* example!

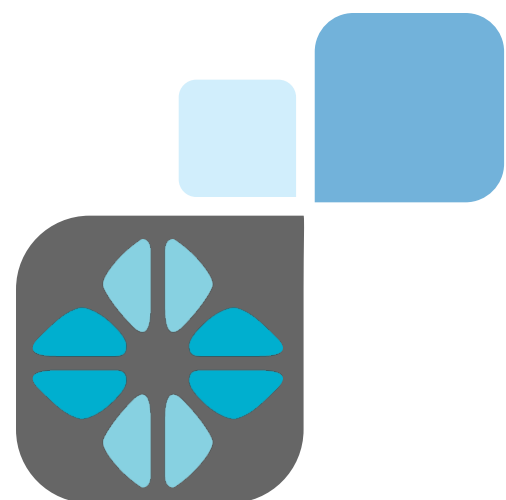




What could this do for the 500,000 annual cases of first-episode psychosis?

Amminger et al., 2010; and <http://www.abc.net.au/science/articles/2014/11/17/4129003.htm>

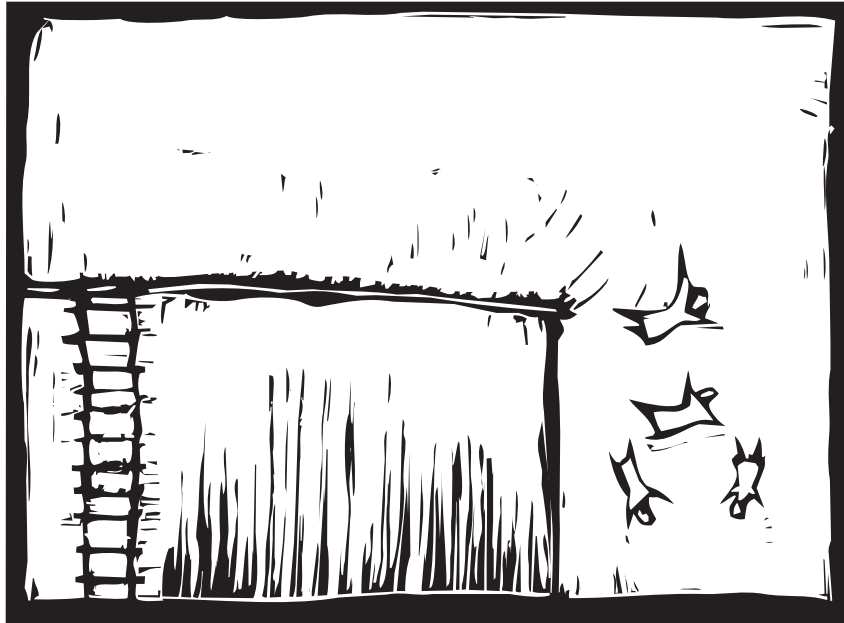




For US *at least* 150,000 fewer cases

For Nevada *at least* 140 fewer cases

Deliberate Self-Harm



- **Subjects n= 49**
- **Recruited from a Dublin emergency room**
- **12 week, double-blind, placebo-controlled trial**
- **2.1 g/d, (1.2 g/d EPA, 0.9 g/d DHA)**
- **(EPAX 5500, Pronova Biocare, Norway)**

Results

- **50% reduction in depression (Beck)**
- **35% reduction in suicidal thinking (OAS)**
- **33% reduction in perception of stress (PSS)**
- **30% improvement in “happiness” (DHUS)**
- **(perception of daily events as uplifting)**



The Better Resiliency Among Veterans with Omega-3's (BRAVO)

\$10 Million clinical trial, non-competative invitation – MRMC, DoD

Bernadette Marriot, Ph.D.- Co-PI, Medical University of South Carolina

A randomized, validated placebo controlled, secondary prevention trial

Intervention: omega-3 HUFAs (3 gm/d) vs. macademia nut oil (*16:1n-7 rich*) (3 gm/d)

Duration: 6 month

Enrollment target: $n = 350$

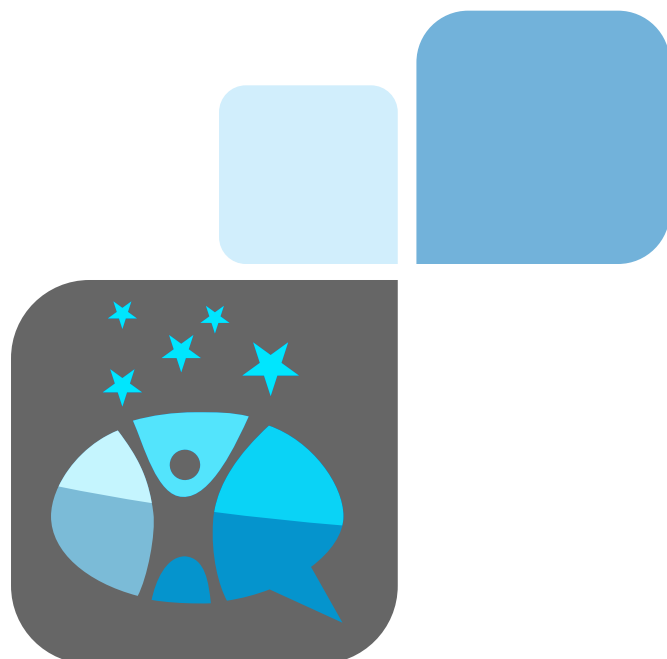
SMARTFISH®
You will understand



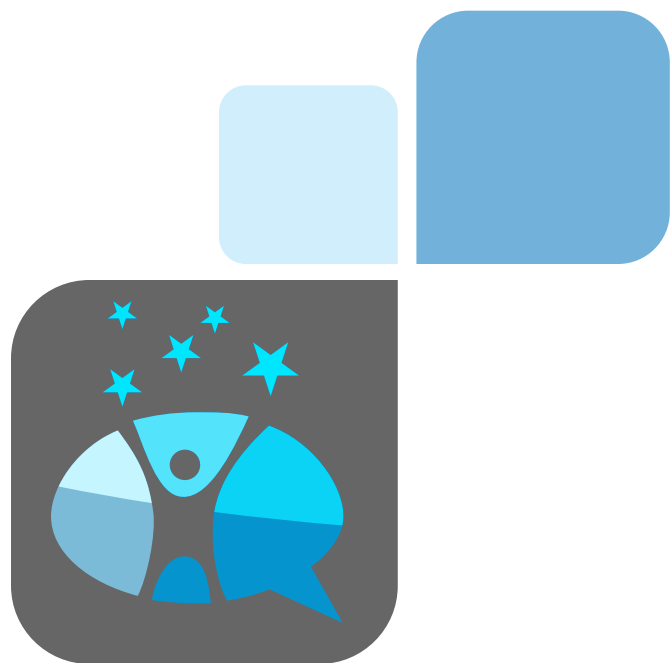
Population: Primary study

- a US Military Services Veterans, age 18 – 90
- **high risk of suicidal behaviors**, within the last 3 months, **either**
 - a) a suicide attempt, **or**
 - b) an inpatient admission with suicide risk, **or**
 - c) a “new flag for suicidality” in the VA medical record **or**
 - d) a score of 0 or greater on the Implicit Associations Test-Suicide (IAT-S)

Primary outcome: Reduction in risk for suicidal behaviors



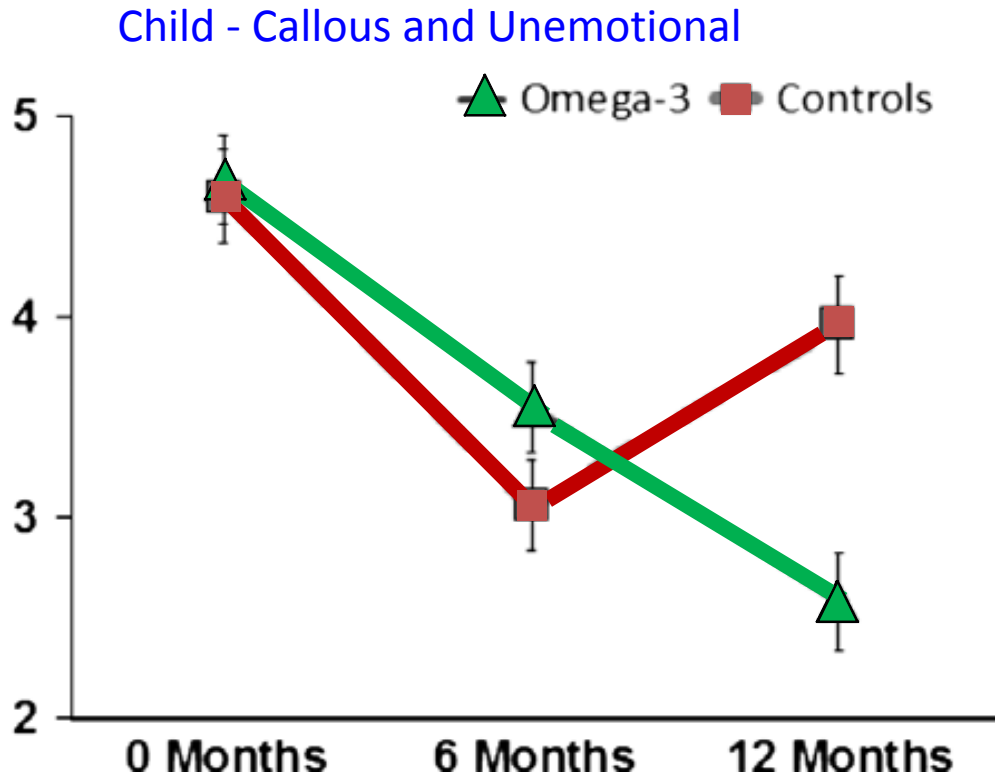
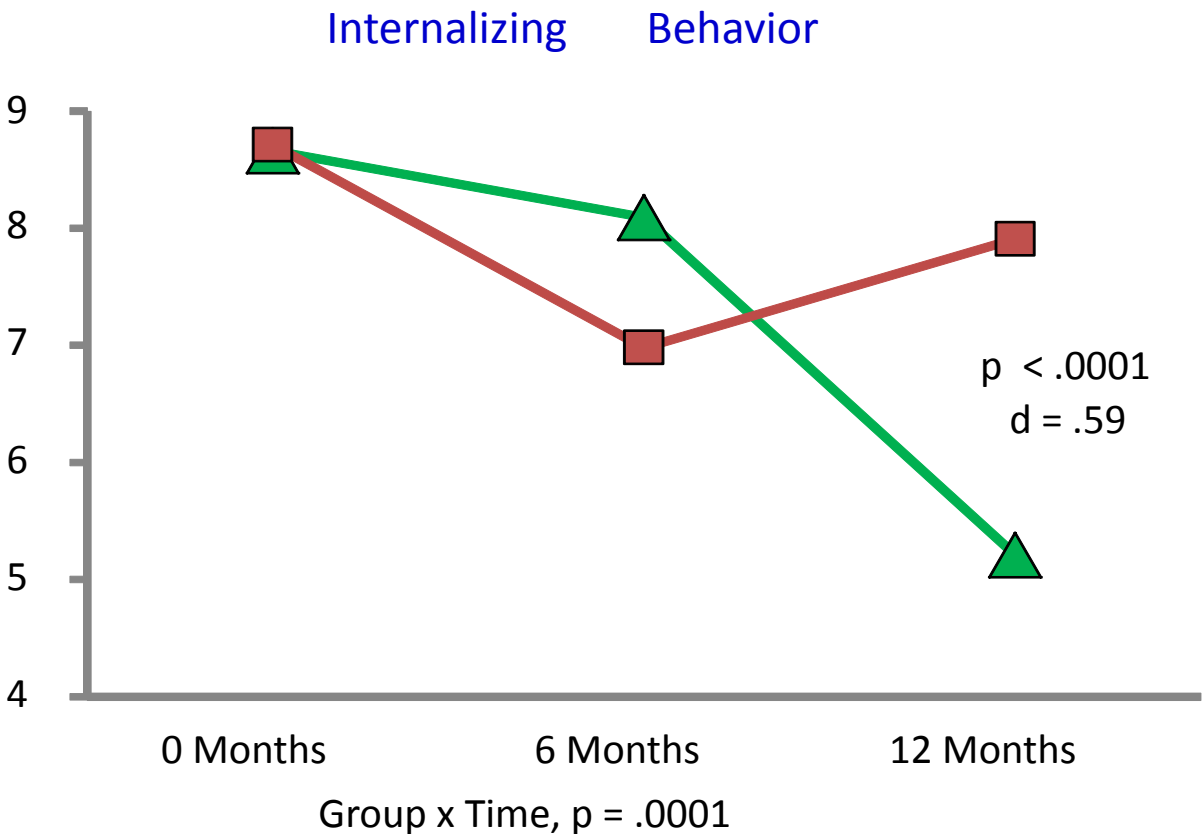
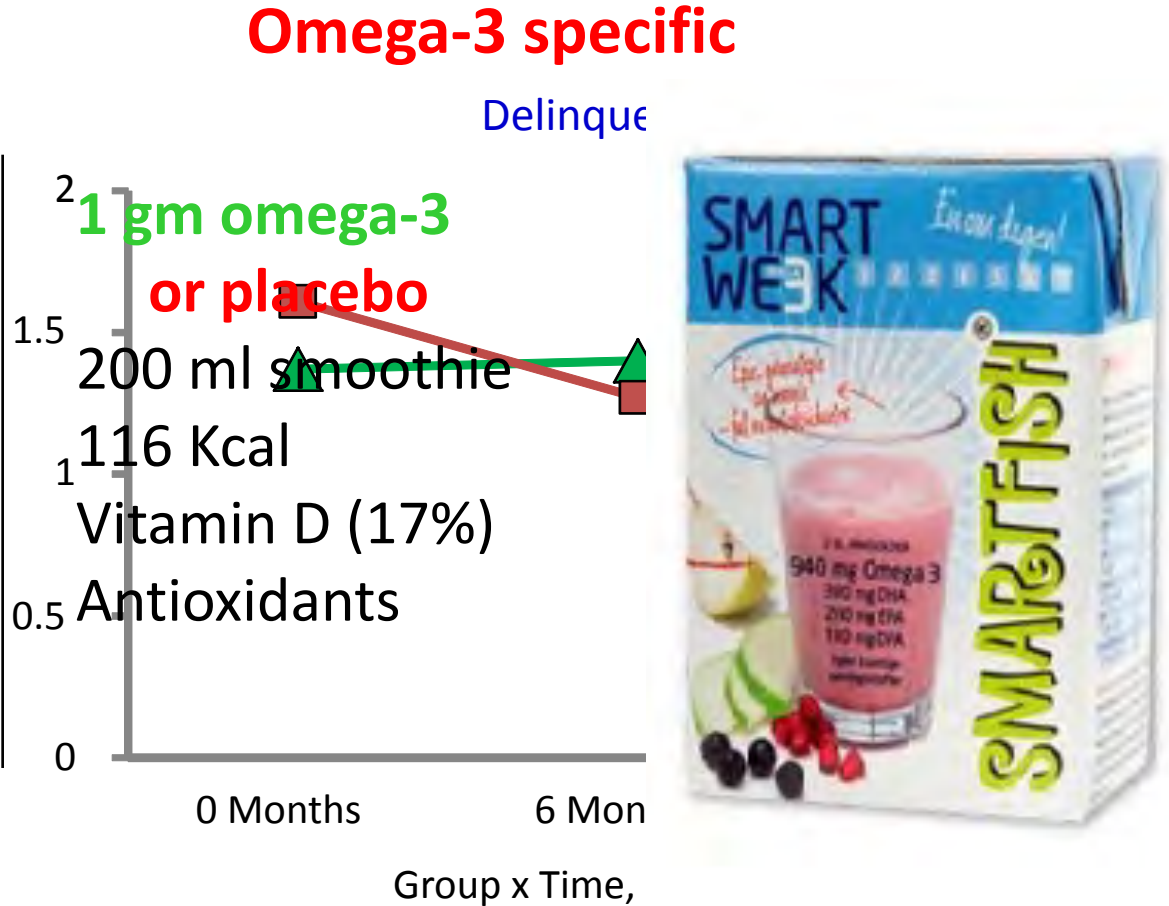
Argentina and USA data from 1961-2000



Mauritius Child Health Project

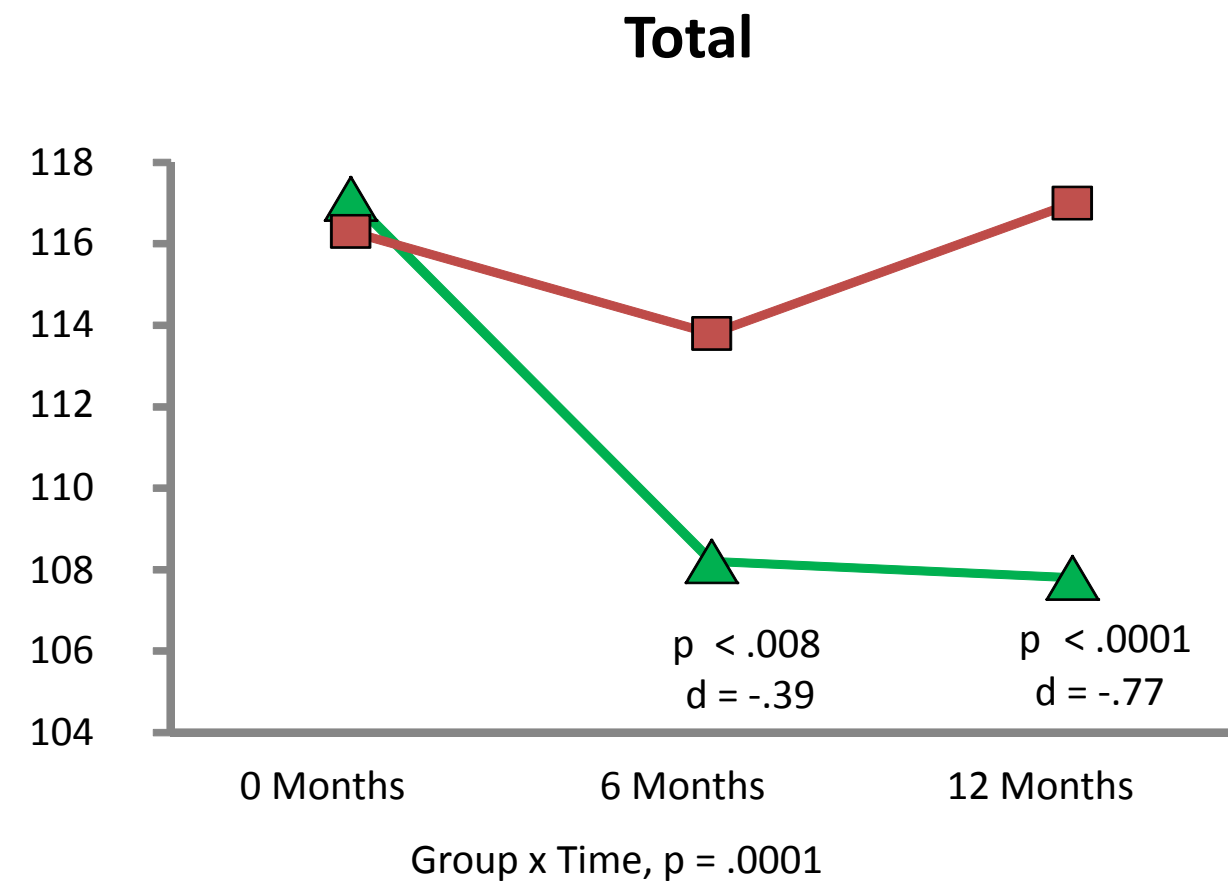
Age 8-16,
Randomized, stratified by age, gender
Blinded, 38.7% Creole, 61.3% Indian

n=95 omega-3, n= 89 placebo
6 mo. intervention, 6 mo. follow up
Child Behavior Checklist (parent)



Parents were less psychopathic when their children took omega-3's

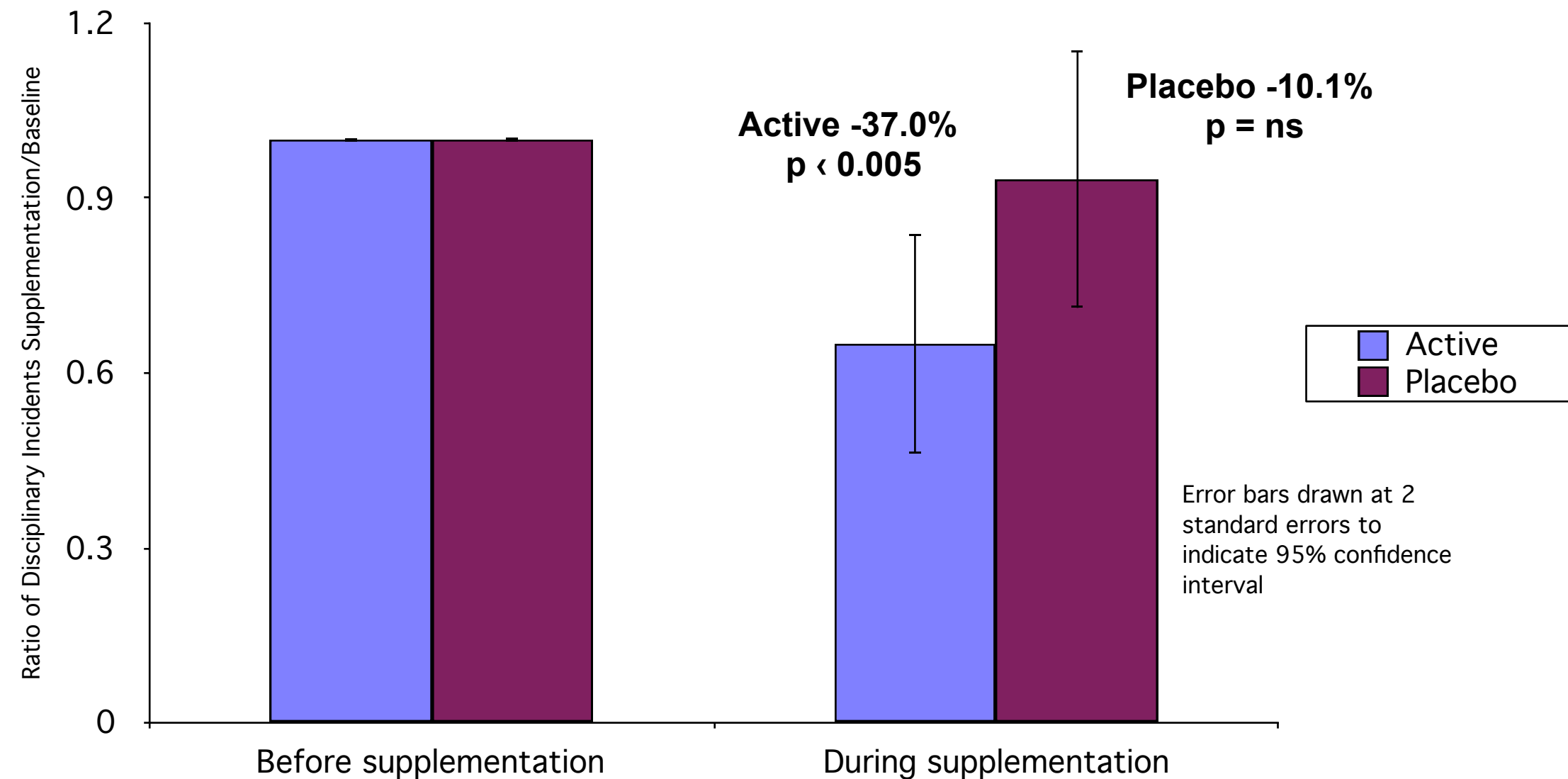
Parent Psychopathic Personality Inventory



Raine, Hibbeln et al, 2014

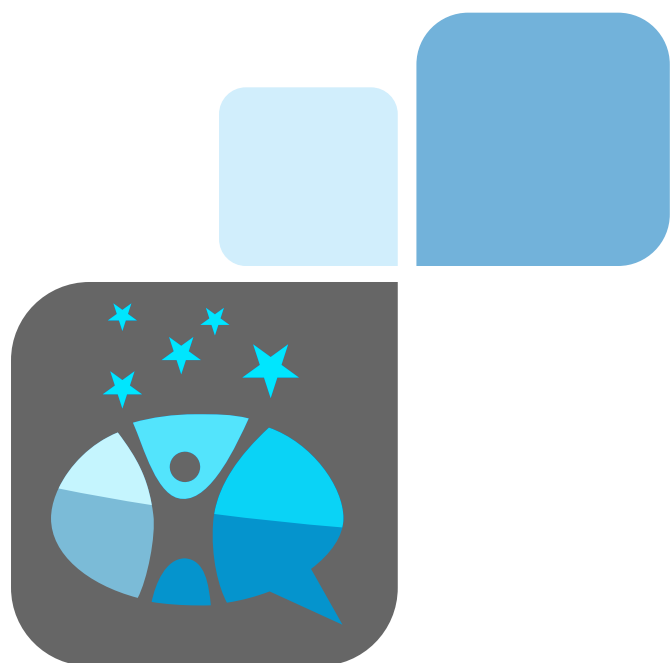


Reduced Felony Violent Offences Among Prisoners with recommended daily amounts of vitamins, minerals and essential fatty acids

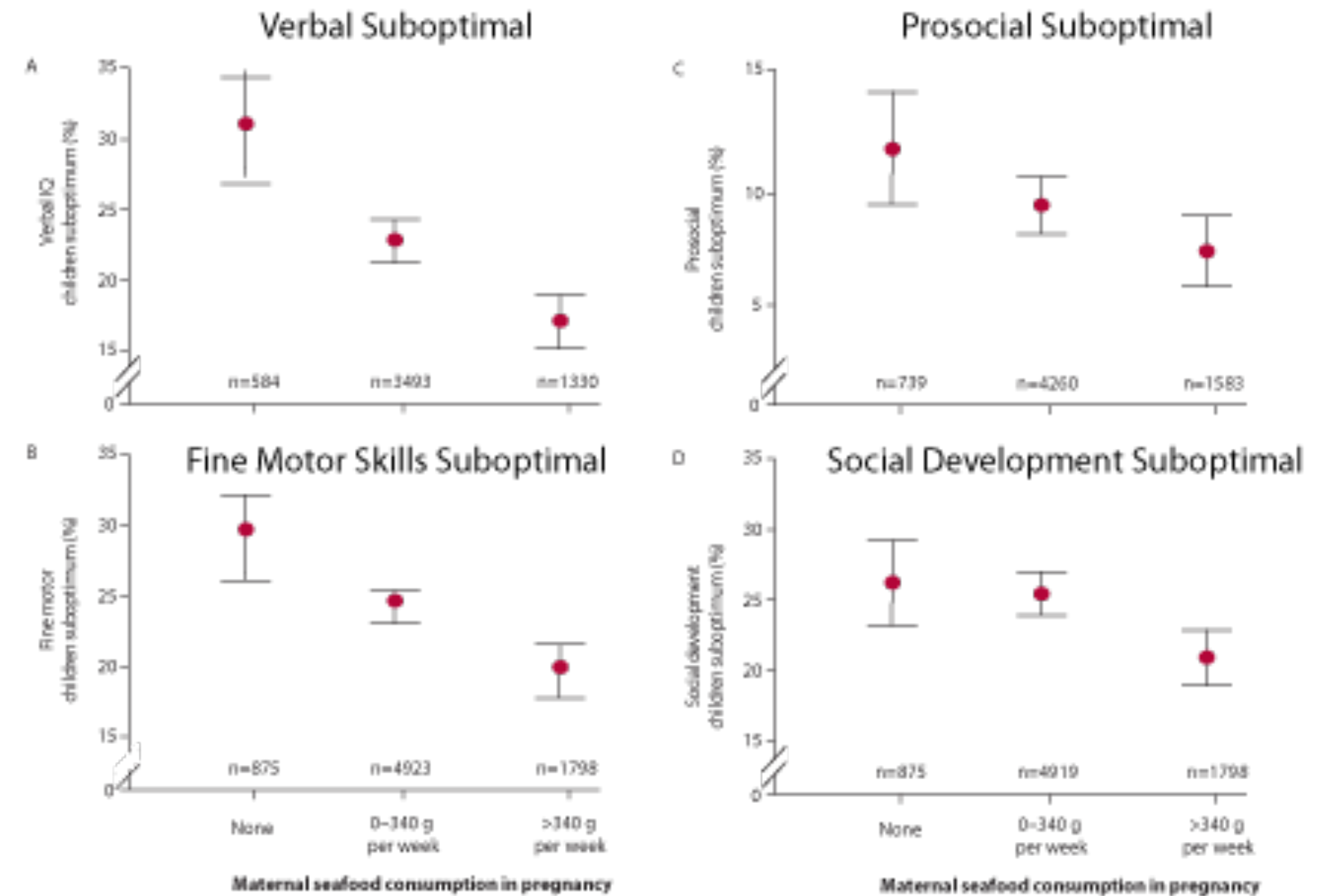
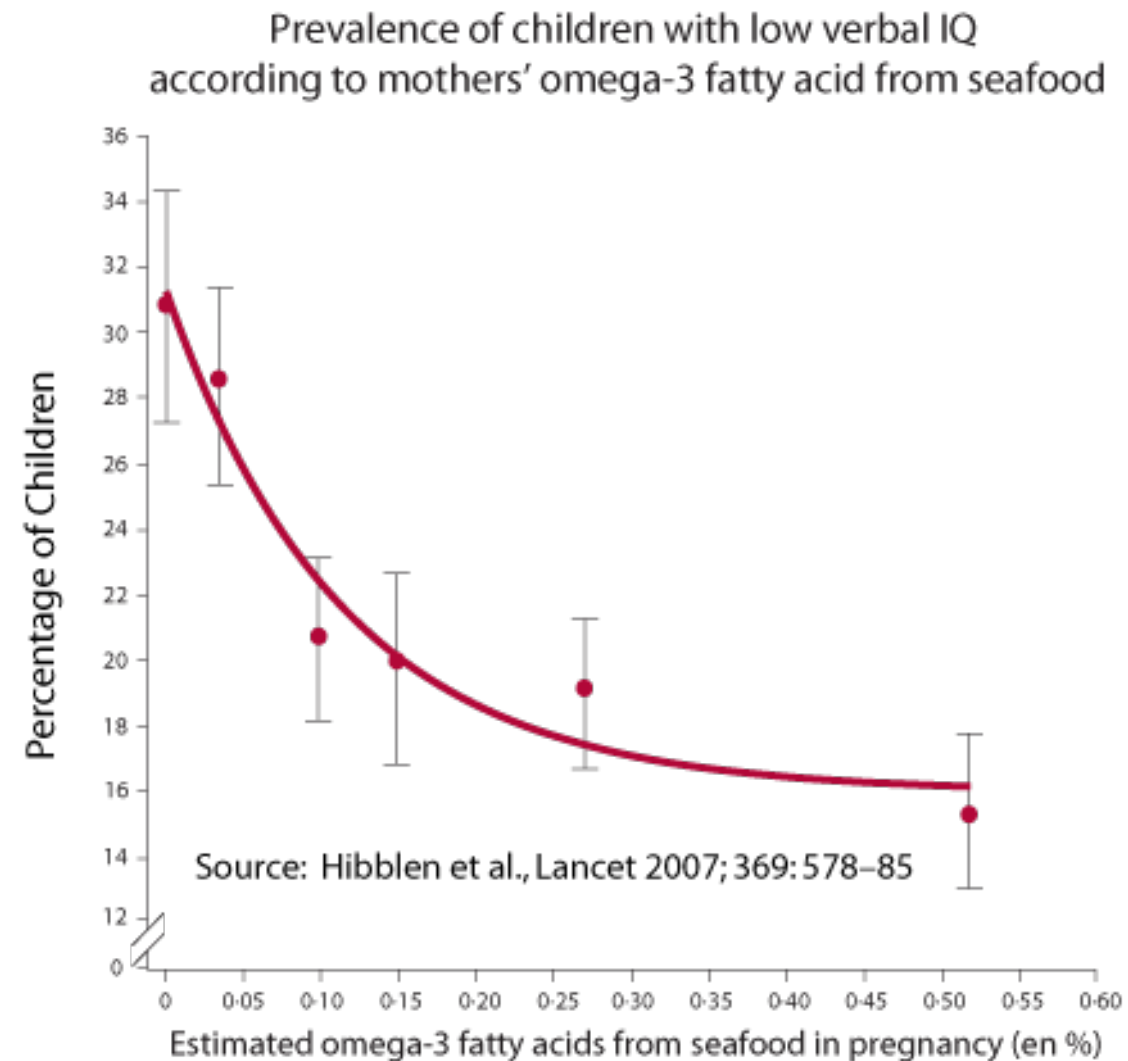


UK maximum security prison - 338 offences among 172 prisoners over 9 months treatment in a compared to 9 months baseline.

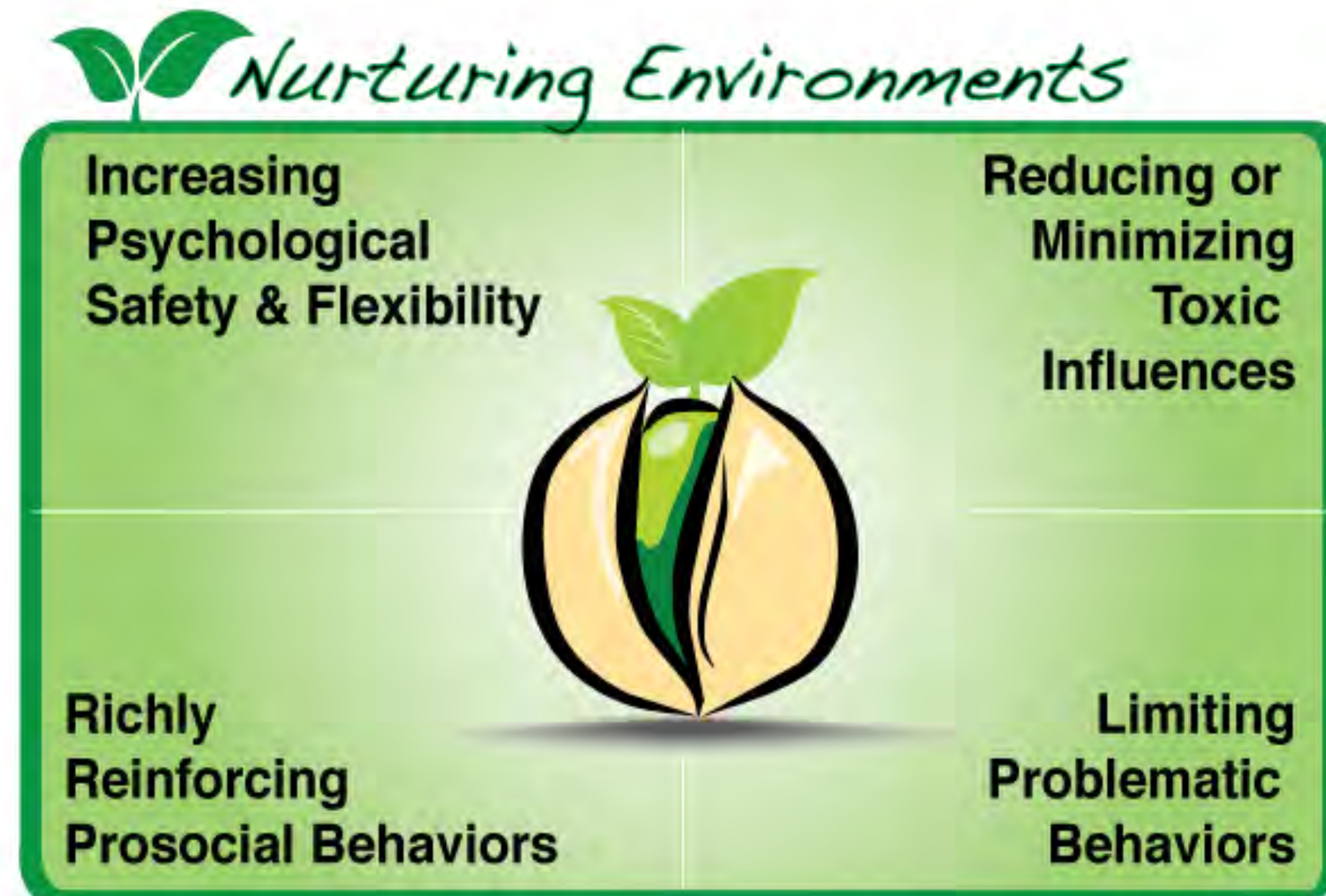
Gesch et al. Br J Psychiatry 2002, 181:22-28



Pregnancy and Development Disorders



What happens when classrooms are nurturing environments?





What is happening to children today? How is affecting families, schools and society?



#SaveAllKids



Every year in this State

- A. Teachers are teaching more children with **hyperactive** behavior that interferes with learning?
- B. Teachers are teaching more children with lots of **emotional problems** that interferes with learning?
- C. Teachers are teaching more children with **aggressive or violent** behavior that interferes learning?
- D. Teachers are teaching more children exposed to **trauma or insecurity** that interferes with learning?
- E. Teachers are teaching more children with **developmental issues** that interferes with learning?
- F. Teachers are experiencing personal or professional stress dealing with these student/classroom



Experience Poll:





Think of one of students with those problems
that causes teachers a lot of... **stress**

All these
are types
of
Classroom/
Discipline
strategies

Not Self
Regulation

- (1) What have you done to **COMMAND** that child to stop those problems?
Example: "Stop that right now."
- (2) What have you done **CONTROL** that child's problems?
Example: "You are going to sit at the Island table so you won't be distracted by the other kids."
- (3) What **CONSEQUENCES** have you given that child for those problems?
Example: "You're not getting recess, and I'm calling your parents!"

Teaching and learning self-regulation and behavior to children requires a nurturing environment

Increase
Psychological
Safety &
Flexibility

Limit
Problematic
Behaviors



Reduce or
Minimize All
Toxic Influences

Richly
Reinforce
Prosocial Behaviors

Biglan et al., American Psychologist, (4), 2012

Nurturing Environments Skillsets Embedded in PAX for Teachers & Students

Nurturing environments are critical for human development—especially at home, at school and the larger community. ¹ Nurturing environments have four main features:

- 1) Increasing psychological flexibility (often called, resiliency) of children and adults to deal with novel and stressful events in life;
- 2) Reducing problematic behaviors, especially among groups of children since such behaviors are socially contagious;
- 3) Reducing exposure to toxic influences, which can include exposure to trauma, bullying, aggression, violence, threats, low trust and reliability of others, drugs, etc.;
- 4) Richly reinforcement of prosocial behaviors that are essential for children and adults to learn to cooperate to create more productive, peaceful, healthy and happy lives.

PAX Good Behavior Game® is fully built on the nurturing environment model, not just in theory but also in practical tested and proven skillsets and strategies that can be used throughout the school day, and generalize to homes, families, and communities in published research.

PAX gives teachers and students a skillset to increase psychological in students via special language of PAX. Students develop a deep purpose to increase PAX, which stands for peace, productivity health, and happiness. Students also work to "sweep away Spleems" (unwanted events or behaviors) that interfere with PAX in the moment. PAX and Spleems are always contextual, based on the activity or setting for which the students briefly predict before and debrief after with adult guidance.

Self-regulation can only happen in context, and contexts vary moment-by-moment in schools. Thus, PAX and Spleems are different when taking a test, during a lecture, in cooperative learning, in an art activity, in gym, in the hallways, on the bus, in the auditorium, etc. Students develop a value of creating more productivity, peace, health and happiness amongst their peers, rather than following rigid rules like raise your hand to speak that doesn't work during cooperative learning or other school tasks. Scientifically, the structure of this psychological flexibility emerges from research on language ². This new language helps students predict, monitor, and reflect—instead of depending on commands and reprimands from adults.

PAX uses something else to increase psychological flexibility, well established over 50 years of research called the Rosenthal or Pygmalion Effect ^{3,4}. This empowers and motivates children who've been otherwise labeled for myriad of problems. This Rosenthal/Pygmalion Effect is achieved by telling the children they ARE PAX Leaders who better their world and better themselves, a true fact based on multiple prior studies and demonstration projects. Students see, hear, and feel the fruits of their PAX Leader actions in multiple ways throughout the implementation of PAX GEG.

PAX gives teachers and students a skillset to reduce problematic behaviors through the school day. PAX GEG reduces problematic behaviors during virtually every school activity via multiple elements of your PAX toolbox. After 3-4 months of implementation, direct observations of classrooms show that problematic behaviors by students drop 70% to 85% ^{5,6}. This change is noticeable by visitors immediate. The reduction happens almost immediate through introduction of the PAX Vision in the classroom, which is made real through evidence-based kernels ⁸ to smooth out multiple types of transitions such as PAX

To read the original article, please download: <http://bit.ly/NurturingEnvironments>





Predicted Benefits of PAX GBG in Your School, District, Tribe or Community When First Grade Students Reach Adulthood After 1-2 Years of PAX GBG Exposure*

Site Estimate for: Frist Graders in the State of Nevada

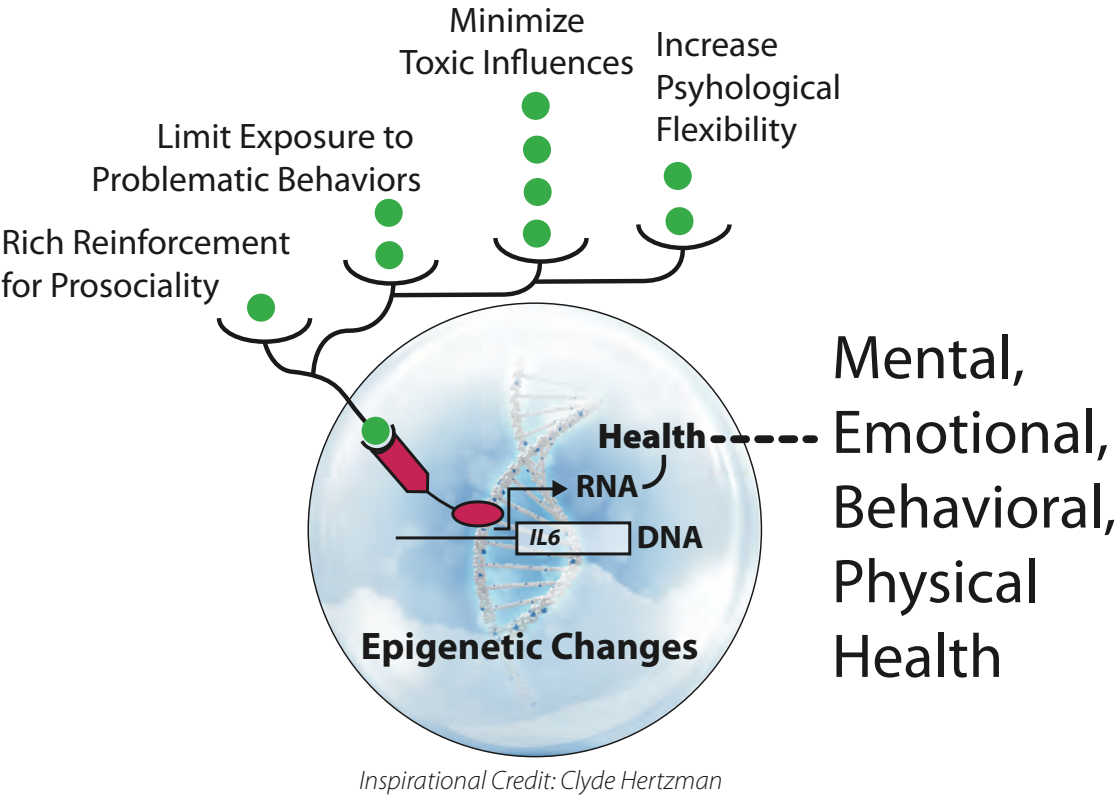
Enter number of First Graders at school, district, Tribe or community>>>>>>

35,800

<<< Enter number of First Graders

3,080	Fewer young people will need any form of special education services
1,993	More boys will likely graduate from high school.
2,391	More boys will likely enter university
3,177	More girls will likely graduate from high school (less teen pregnancy)
2,483	More girls will likely enter university
348	Fewer young people will commit and be convicted of serious violent crimes
3,442	Fewer young people will likely develop serious drug addictions
2,355	Fewer young people will likely become regular smokers
1,268	Fewer young people will likely develop serious alcohol addictions
1,736	Fewer young women will likely contemplate suicide
2,355	Fewer young men will likely attempt suicide
\$466,116,000	Predicted financial net savings to students, families, schools, communities, state/federal governments
\$23.67	Estimated Cost of PAX GBG Materials Per Child for Lifetime Protection
\$22.00	Estimated Cost of External Training & Technical Supports Per Teacher Prorated per Child's Lifetime
\$26.80	Estimated Cost of Internal Supports for Implementation and Maintenance by Teachers Prorated per Child's Lifetime

Nurturing Environments





Spend time the wonderful vision and keep it up and alive, because

By developing internalized and class-understanding what PAX and Spleems are, students learn self-regulation.

Using PAX and Spleems helps students instantly generalize what they need to do in new situations.





#SaveAllKids



Debrief components..kids predict, monitor and reflect. How is this a nurturing environment.

- Think about what you saw in Jade's 5th grade classroom...

Increase
Psychological
Safety &
Flexibility

Limit
Problematic
Behaviors



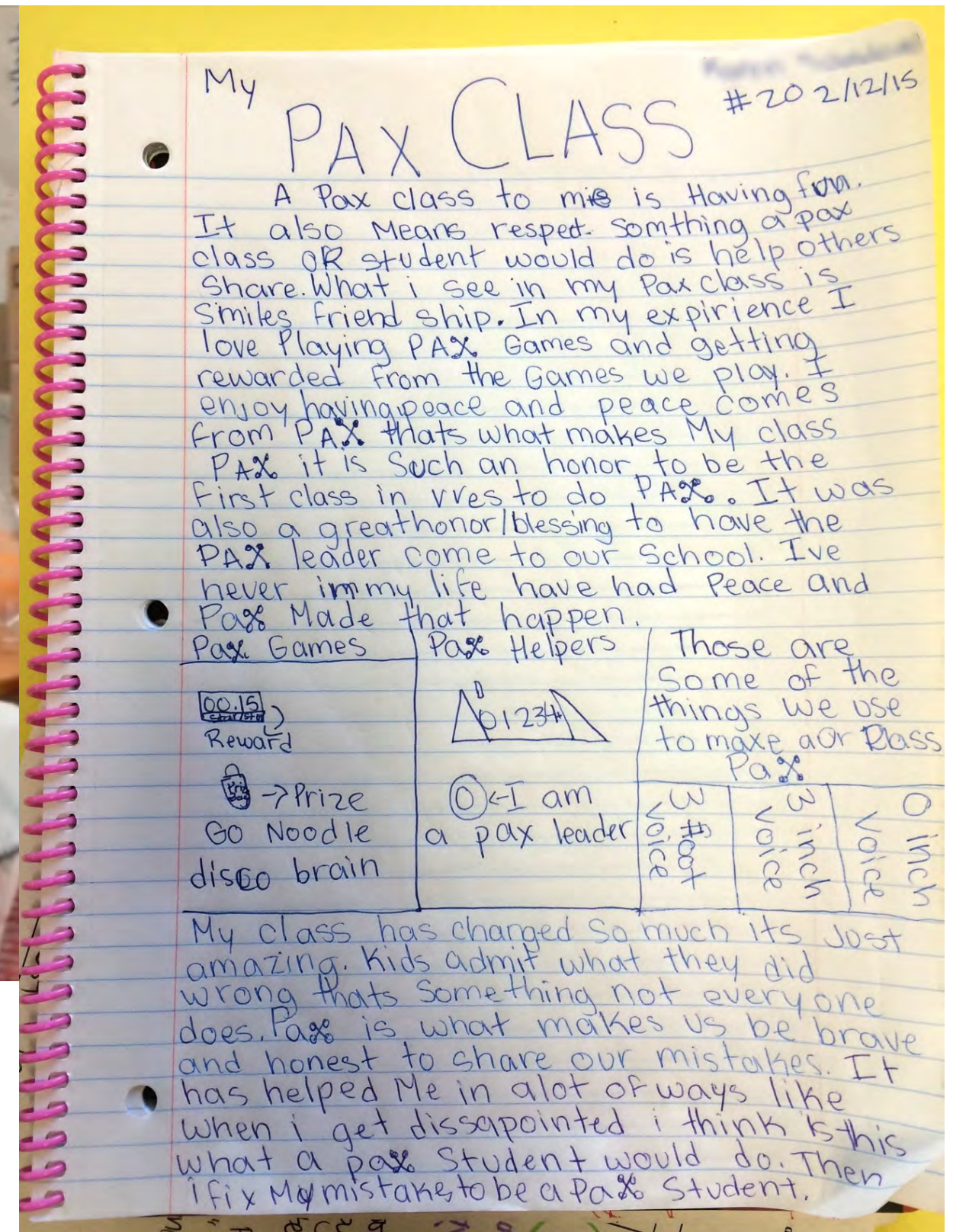
Reduce or
Minimize All
Toxic Influences

Richly
Reinforce
Prosocial Behaviors

Biglan et al., American Psychologist, (4), 2012



What do the kids think?

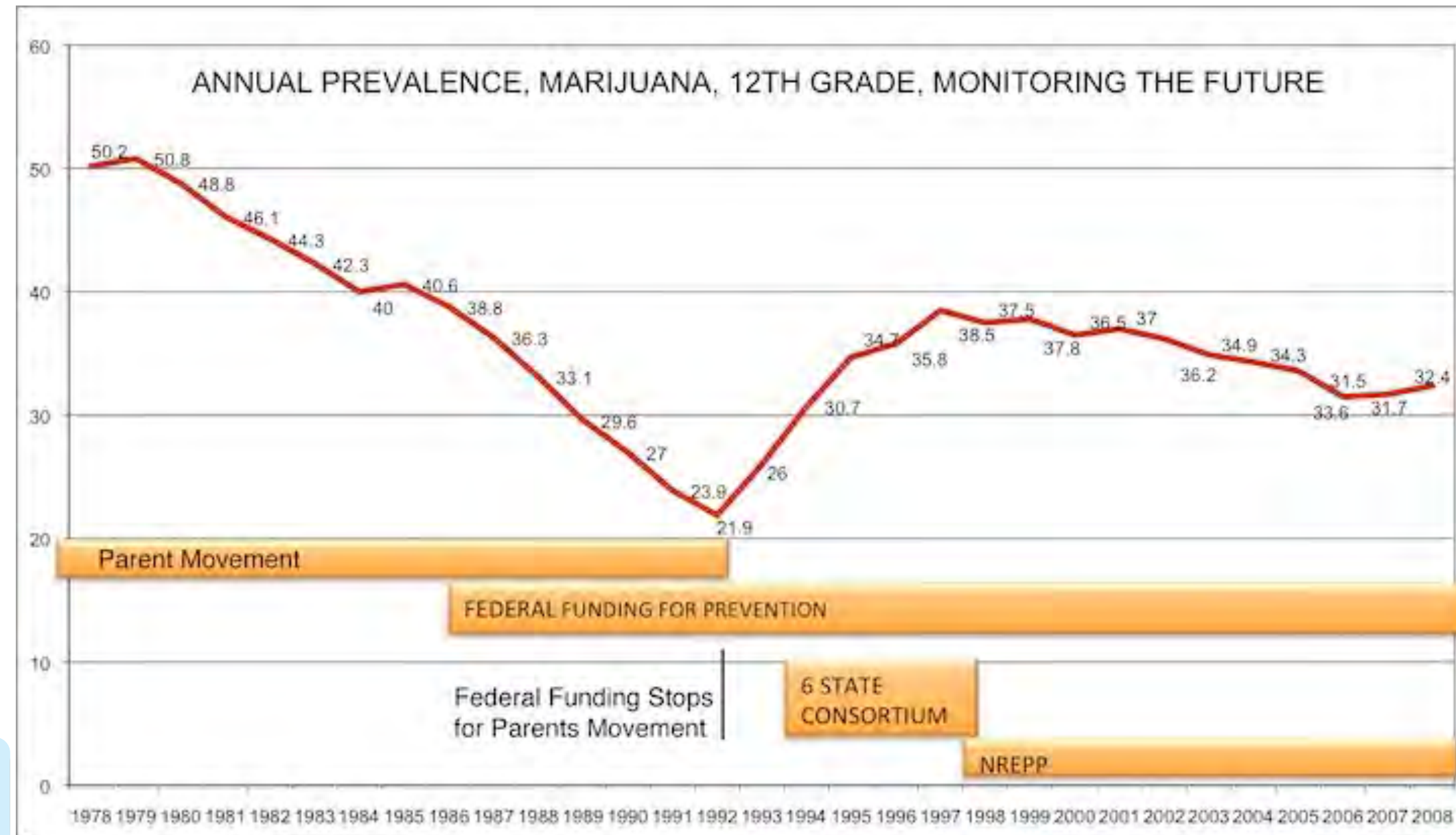
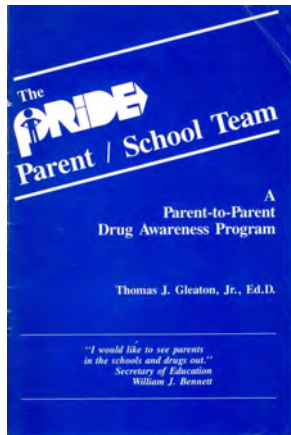


#SaveAllKids

Getting public support (youtube)



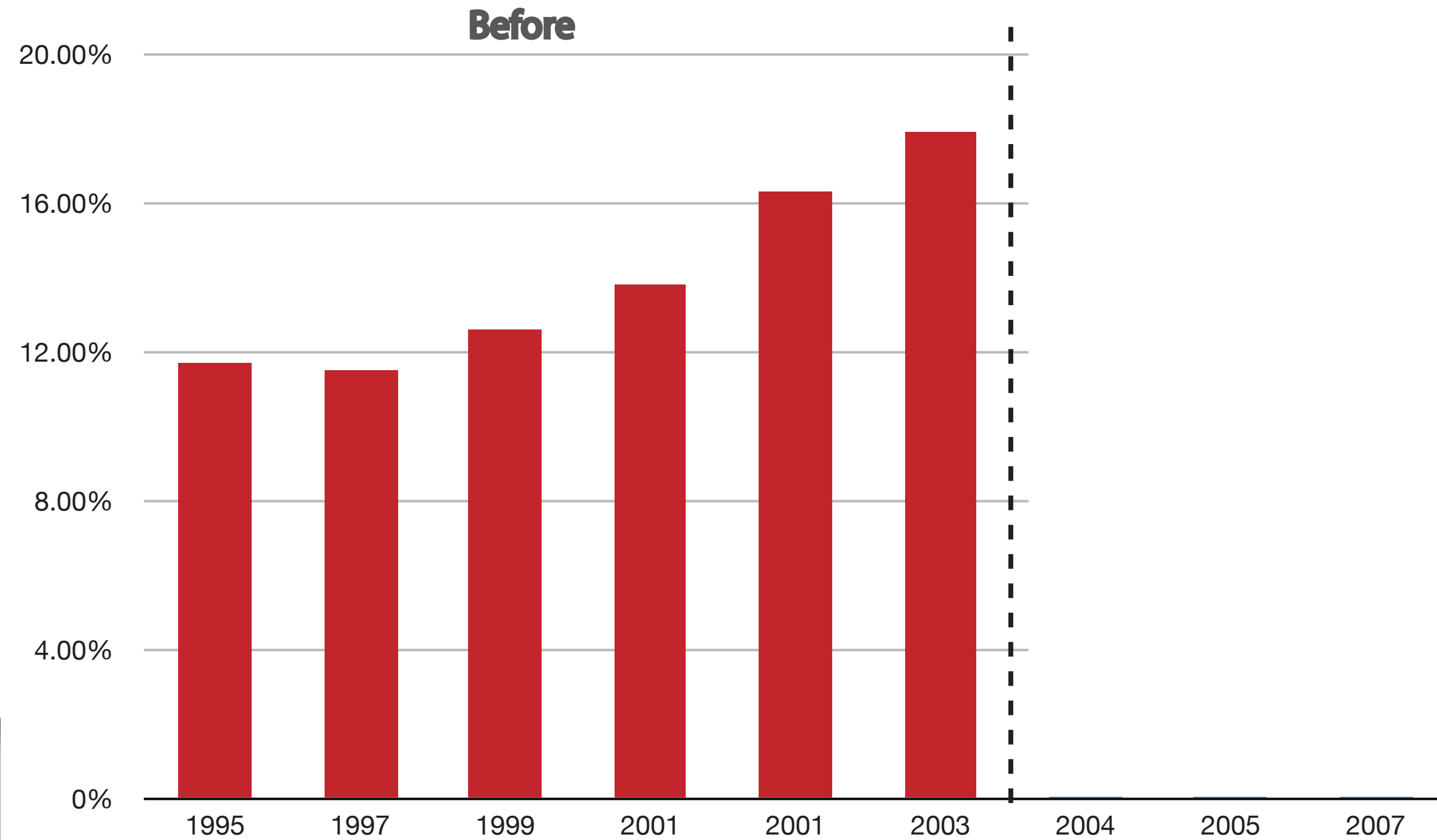
Food for thought...



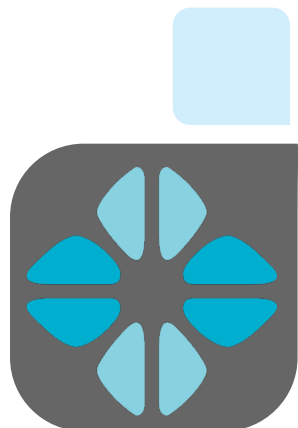
Families & communities mobilizing v. programs

Wyoming

Percent of 18-44 Year Old Women Binge Drinking in Last Month



Source: Behavioral Risk Factor Survey, Centers for Disease Control



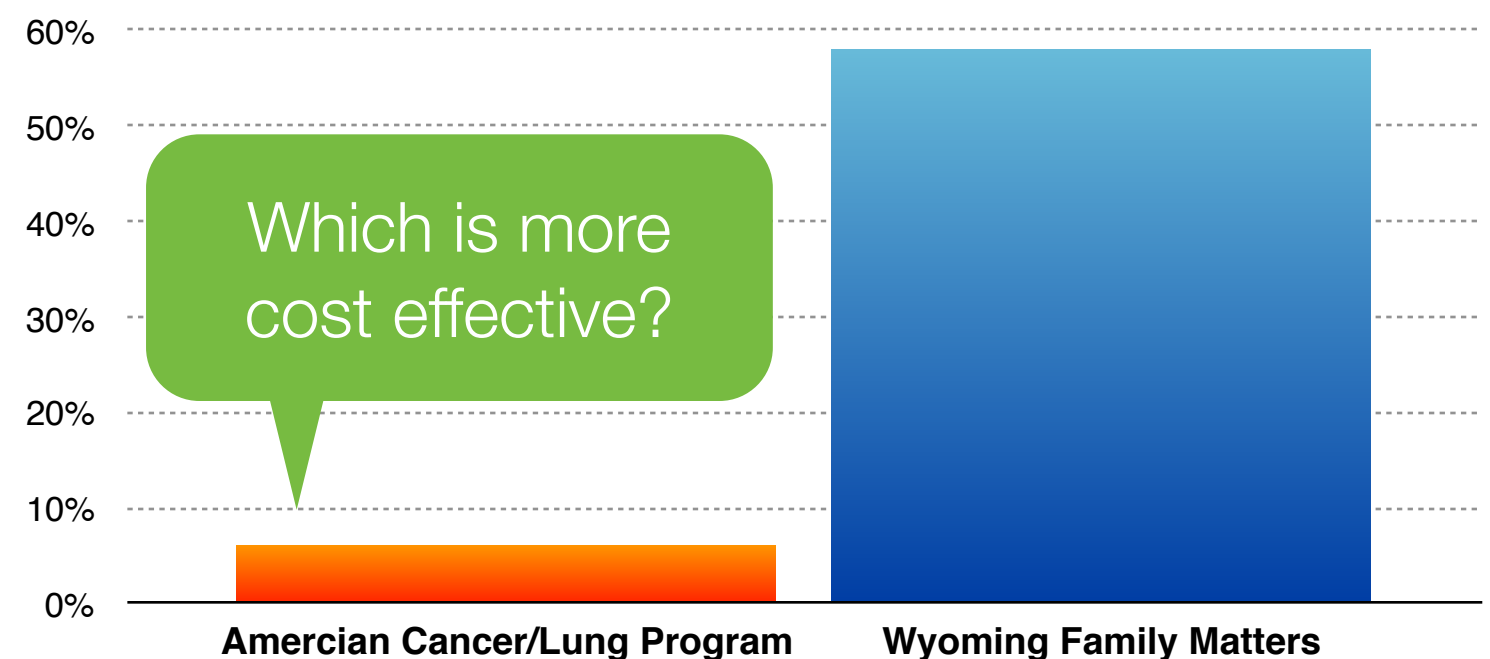
A man and a woman are standing on a porch. The man, wearing a dark t-shirt, is holding a dark bottle and a small card or piece of paper. He is looking down at the card with a serious expression. The woman, wearing a purple t-shirt, is looking at him with a concerned or questioning expression. The porch has a wooden railing and a wooden roof structure. The background shows some trees and a bright sky.



Wyoming Families Matter

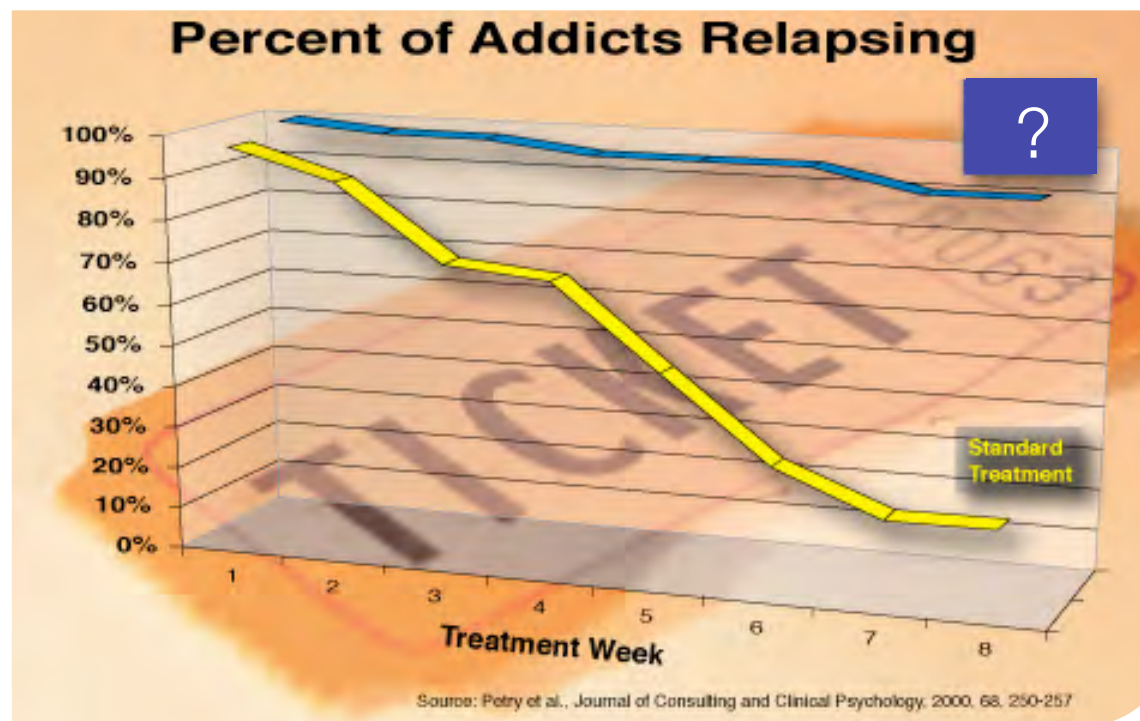
✓ Wyoming Department of Health, Substance Abuse Division
Maternal and Child Health Section • Public Health Nursing • Department of Family Services

Comparative Effective of Policies to Reduce Tobacco Addictions Among Pregnant Women: Tobacco-Free Two Months Post Delivery





What is the most effective adult drug treatment?

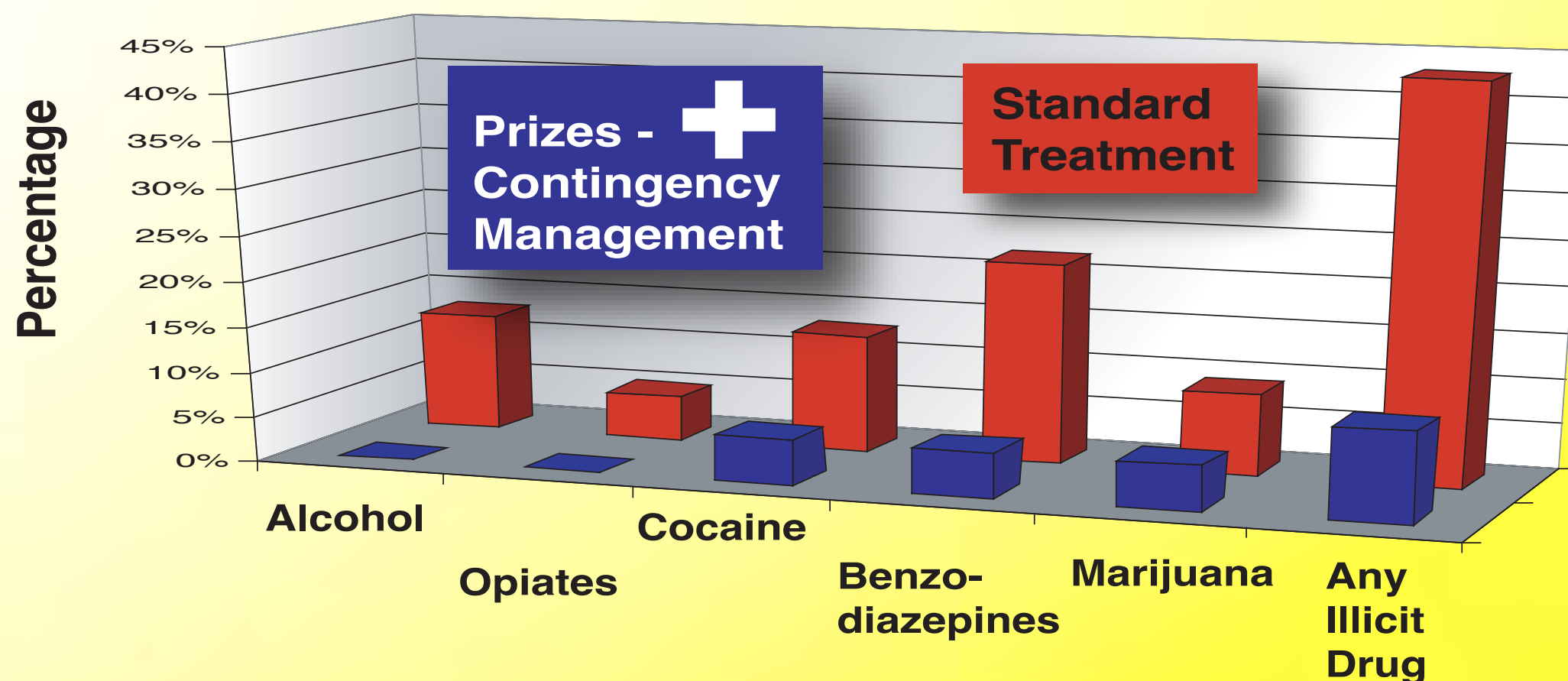
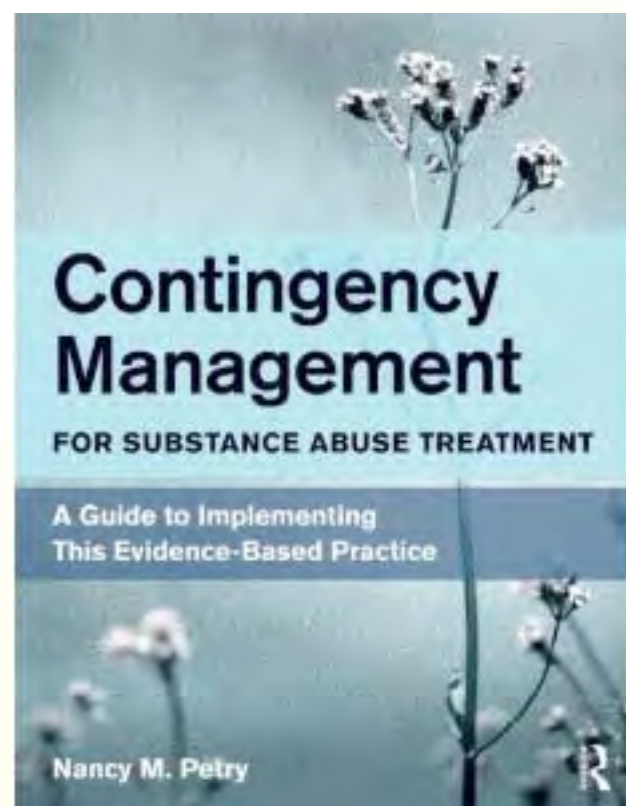


Why not use the low-cost (\$200 to \$400) best practice from NIDA that dramatically reduces all addictions among virtually every group of people?

Barry, D., B. Sullivan, et al. (2009). "Comparable efficacy of contingency management for cocaine dependence among African American, Hispanic, and White methadone maintenance clients." Psychology of Addictive Behaviors 23(1): 168-174.



Positive Drug Tests a Week 8



Source: Petry et al., Journal of Consulting and Clinical Psychology, 2000, 68, 250-257

+ = A proven tool for addiction treatment

Get Adult Users into Treatment NOW

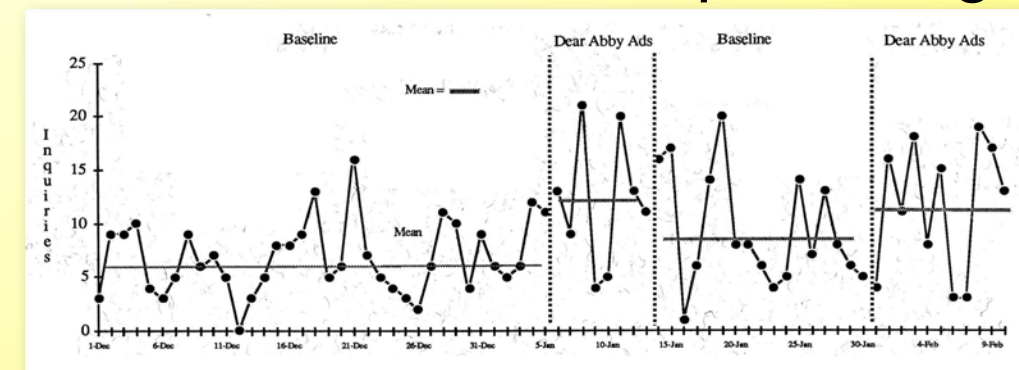
• How? (examples)

- Advertise *Free* treatment
- Provide *Free* outreach to businesses (50% to 70% users are employed)
- Provide *Free* community reinforcement and family training (CRAFT), which teaches behavior change skills, to concerned significant others (CSOs) of treatment-refusing illicit drug users

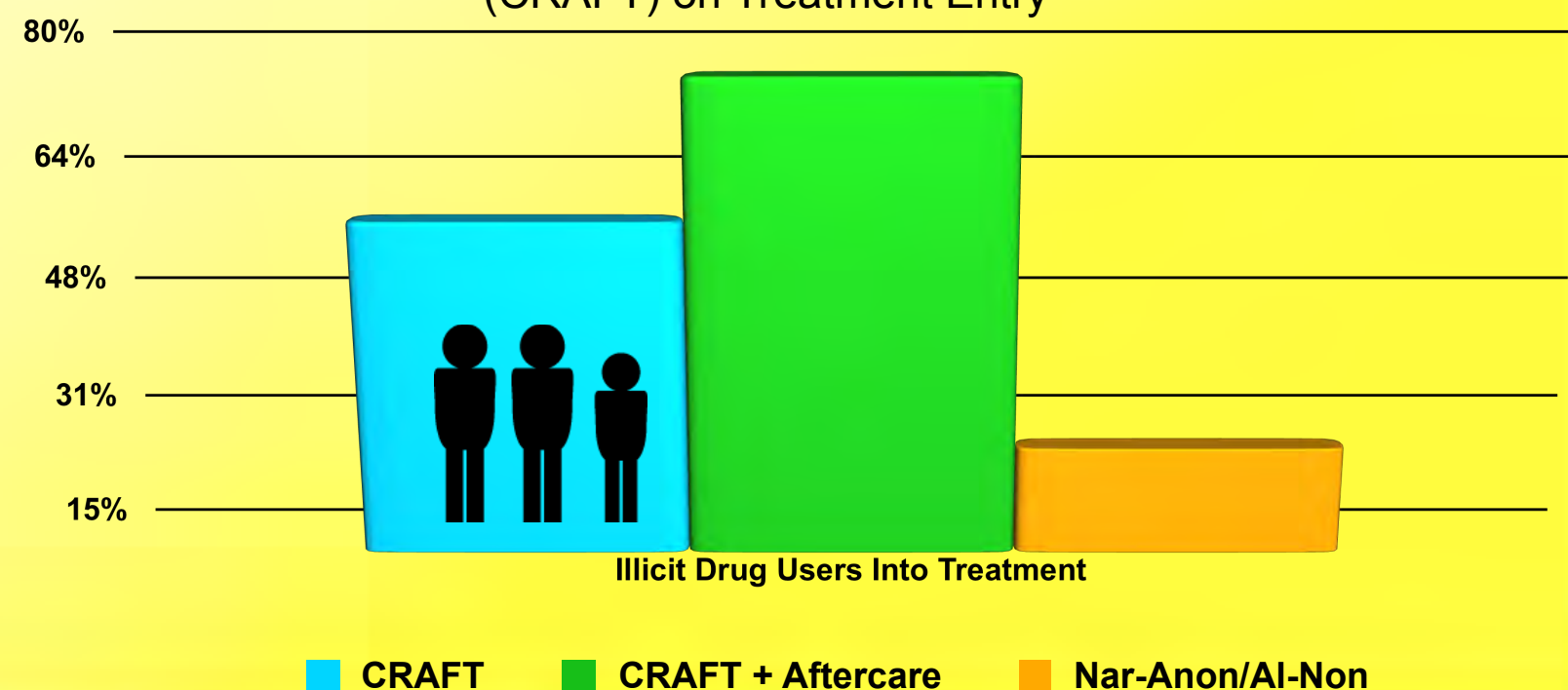
Meyers, Miller Smith & Tonigan, 2002

Advice “ads” on help seeking

Embry, 1990



Impact of Community Reinforcement and Family Training (CRAFT) on Treatment Entry

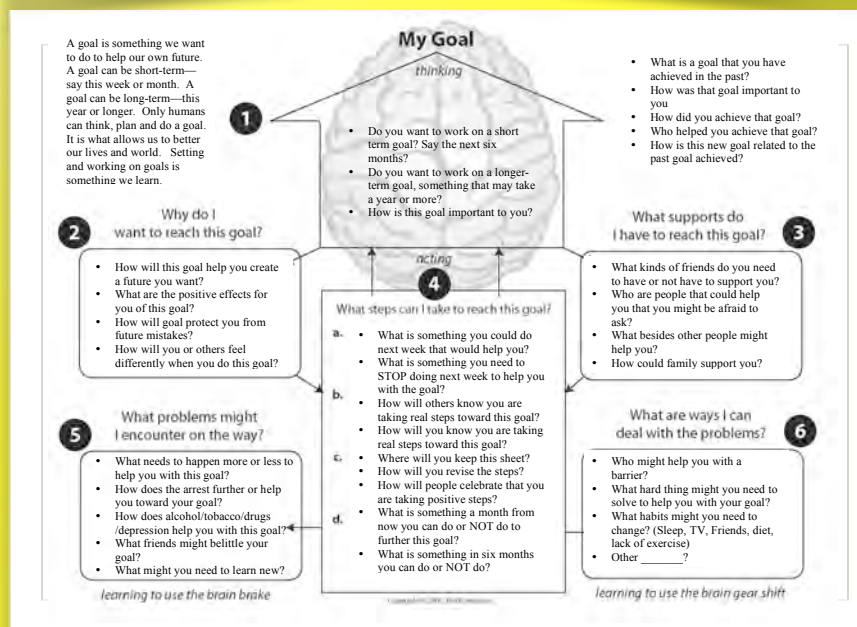
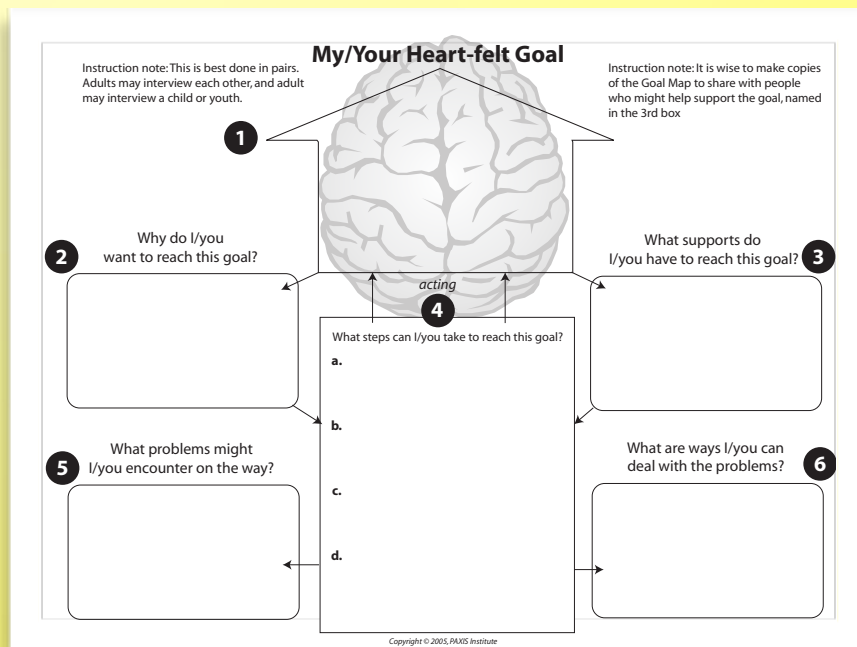
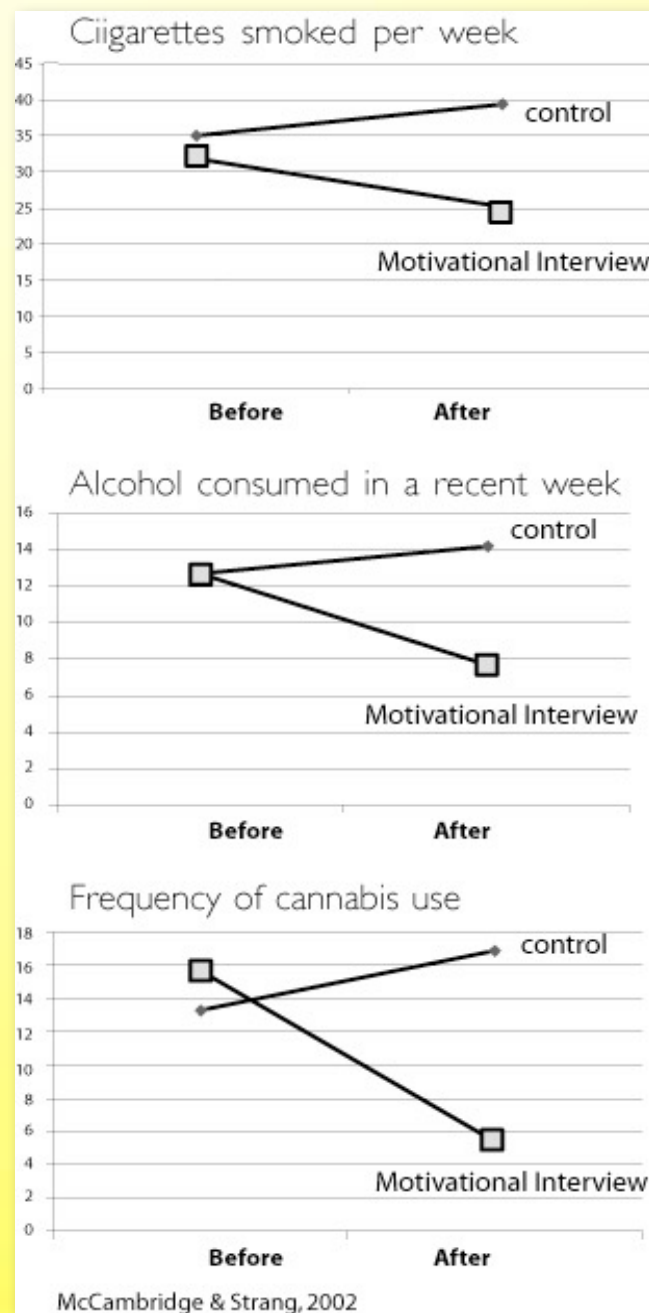


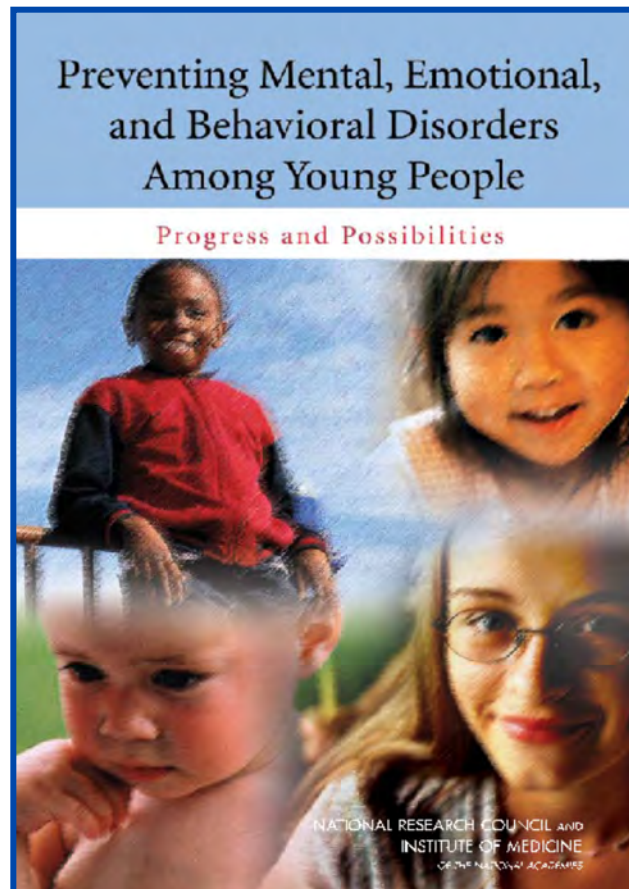
Helping at-risk youth & young adults



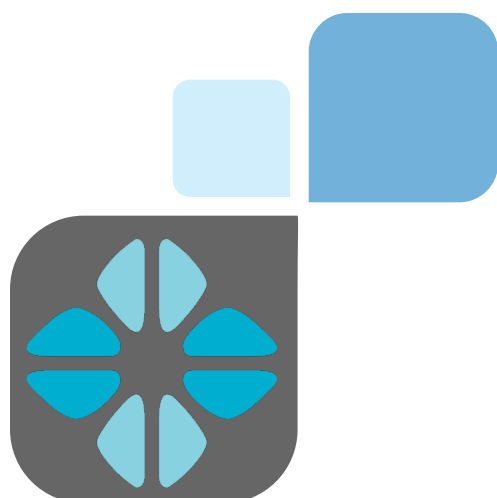
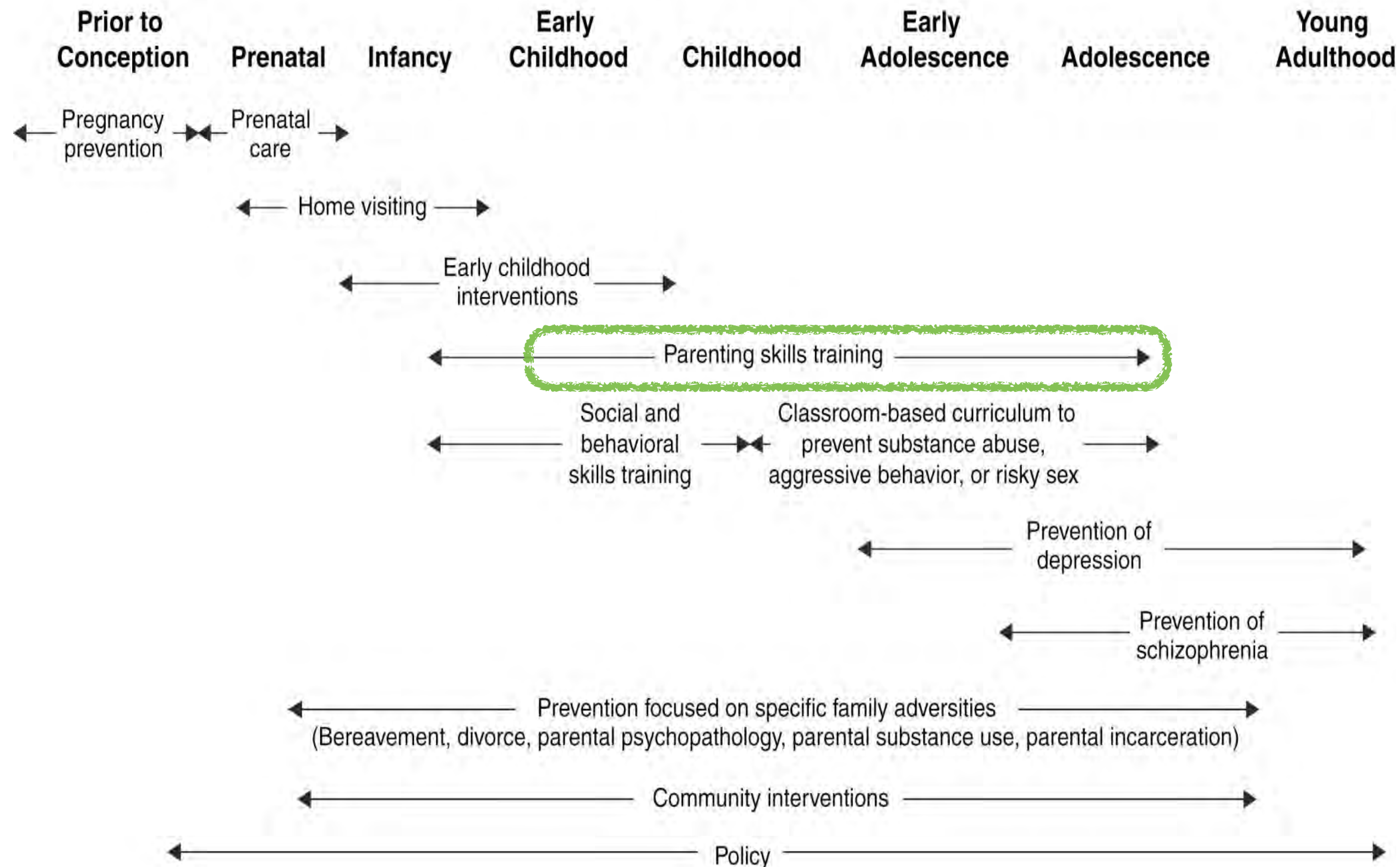
- **How? (examples)**
 - Conduct motivational interviews/ enhancement at alternative schools, juvenile intake and emergency rooms
 - Contingency management and street outreach for homeless/couch youth or young adults

McCambridge, J., & Strang, J. (2004). The efficacy of single-session motivational interviewing in reducing drug consumption and perceptions of drug-related risk and harm among young people: results from a multi-site cluster randomized trial. *Addiction*, 99(1), 39-52.





Interventions by Developmental Phase



Underestimate of official, substantiated child maltreatment cases...

1 confirmed
cased



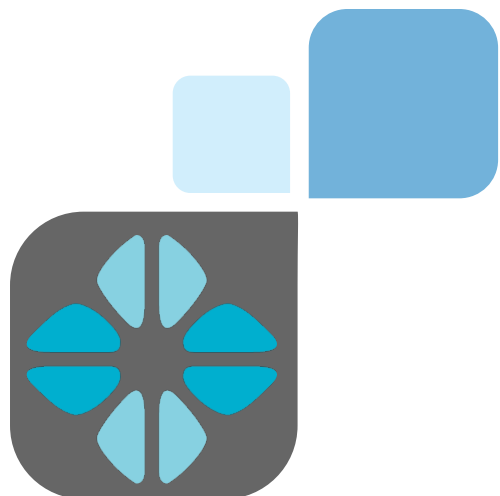
= 40 Cases Never Reported



Thus, in 2009,
if 3,803 cases
were confirmed
in Arizona...

152,000
probably
happened in AZ

Theodore, A. D., Chang, J. J., Runyan, D. K., Hunter, W. M., Bangdiwala, S. I., & Agans, R. (2005). Epidemiologic Features of the Physical and Sexual Maltreatment of Children in the Carolinas. *Pediatrics*, 115(3), e331-337.



Tuesday, April 9, 2013 8am – 4pm
Creating Safe Environments –
Advocacy, Prevention, and Support for Children in Arizona
A Summit for Leaders:
Health, Education, Government, Business, Non-Profits



[Register @ azpbs.org/strongkids](http://azpbs.org/strongkids)

Please join us for this important day of keynote presentations and breakout sessions at Eight, Arizona PBS. Gain research perspectives from Dr. Vincent Felitti, Dr. Ron Prinz, Dr. Dennis Embry, Dr. Dean Coonrod, Clarence Carter, and other experts from the field. Welcome by City of Phoenix Mayor Greg Stanton. Registration is now open at azpbs.org/strongkids. Continental breakfast, lunch, and parking included.

Summit funded by a grant from:



Additional funds provided by:



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Business, Non-Profits**



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Opening



ACE Consortium



Keynote Speakers Presentations and Resources



[Vincent J. Felitti, MD](#)



[Ron Prinz, PH.D.](#)



[Dennis D. Embry, PH.D.](#)

