

Risk Factors are not Predictive Factors due to Protective Factors

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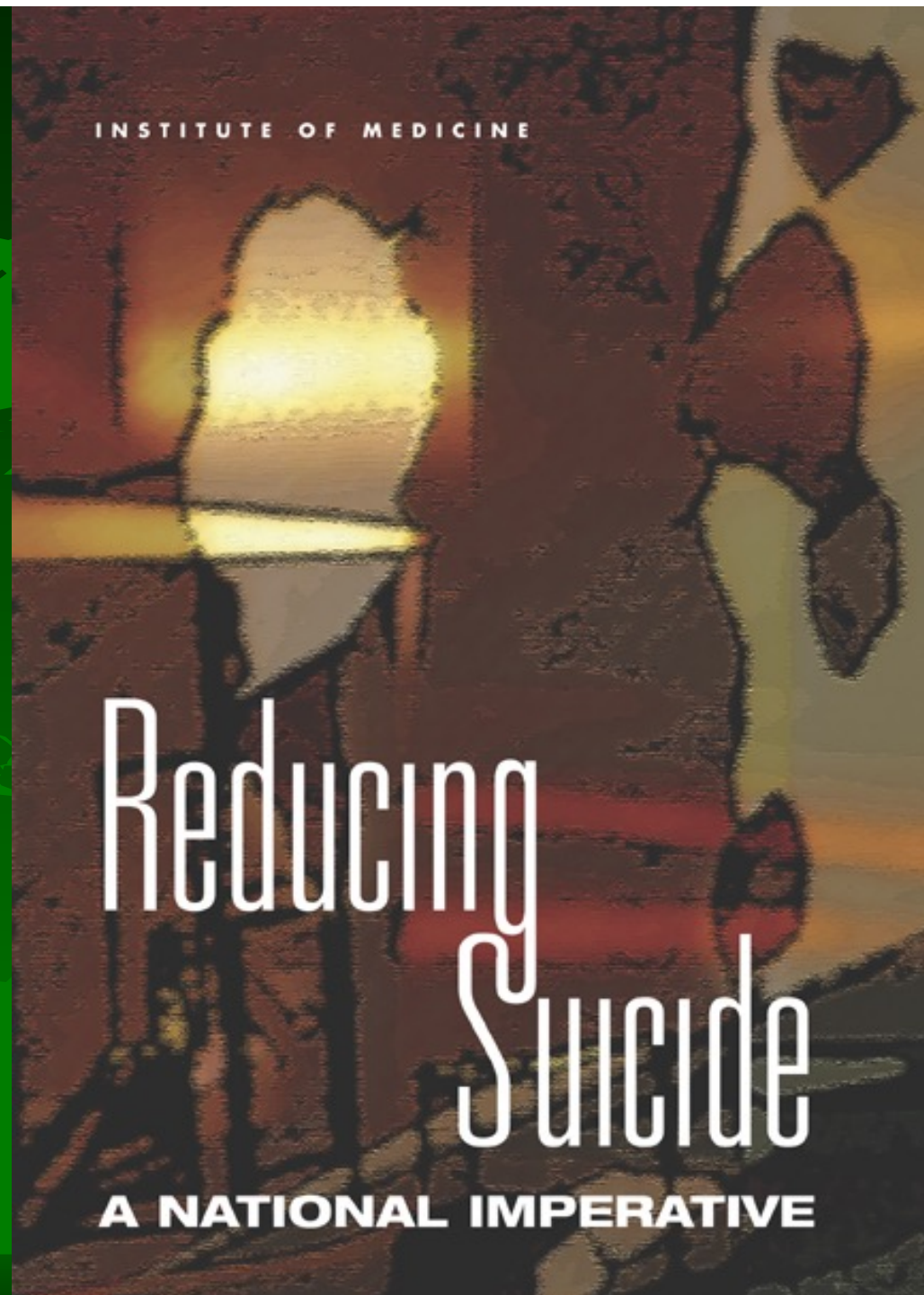
(Birthplace of Child Psychiatry)

**Professor Psychiatry and Public Health
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University of Illinois at Chicago

IOM: Reducing Suicide Report where the notion that risk factors were not predictive factors due to protective factors developed.

- 20,000/100,000 people get depressed
- 5,000/100,000 people attempt suicide
- 11-20/100,000 people complete suicide



Dr. David Satcher's Children's Mental Health Conference suggested our Nation focus on:

- Children in Child Protective Services
- Children in Juvenile Justice Facilities
- Children in Special Education



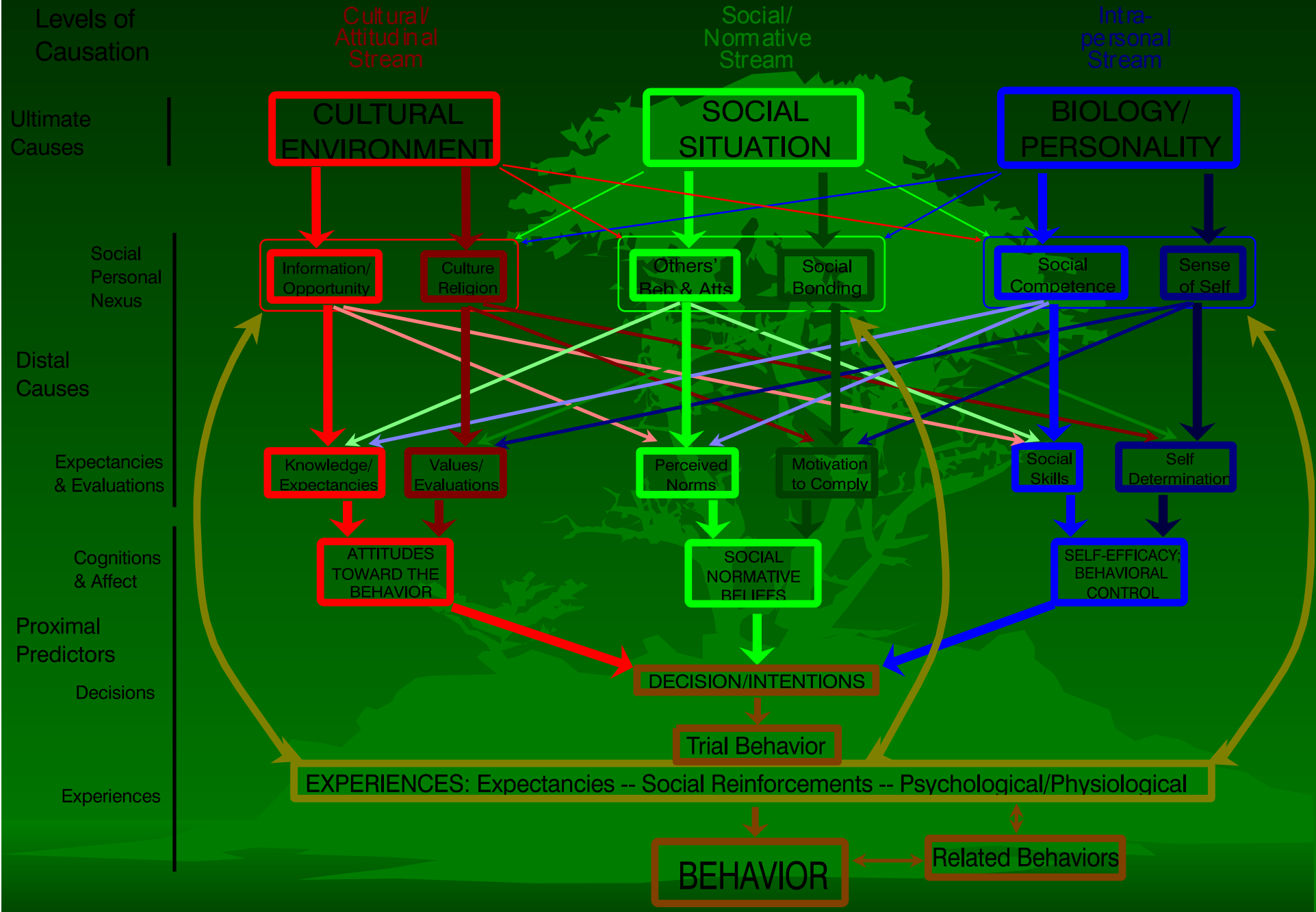
Report of the
Surgeon General's Conference on
Children's Mental Health:

A National Action Agenda

Triadic Theory of Influence

- Sociological theories of social control and social bonding (Akers et al., 1979; Elliott et al., 1985)
- Peer clustering (Oetting & Beauvais, 1986)
- Cultural identity (Oetting & Beauvais, 1990-91)
- Psychological theories of attitude change & behavioral prediction (Fishbein & Ajzen, 1975; Ajzen, 1985)
- Personality development (Digman, 1990)
- Social learning (Akers et al., 1979; Bandura, 1977, 1986)
- Integrative theories (e.g., Jessor & Jessor's, Problem Behavior Theory; Brook's Family Interaction Theory, Hawkins' Social Development Theory)
- See Petraitis, Flay and Miller (1995).

THE THEORY OF TRIADIC INFLUENCE



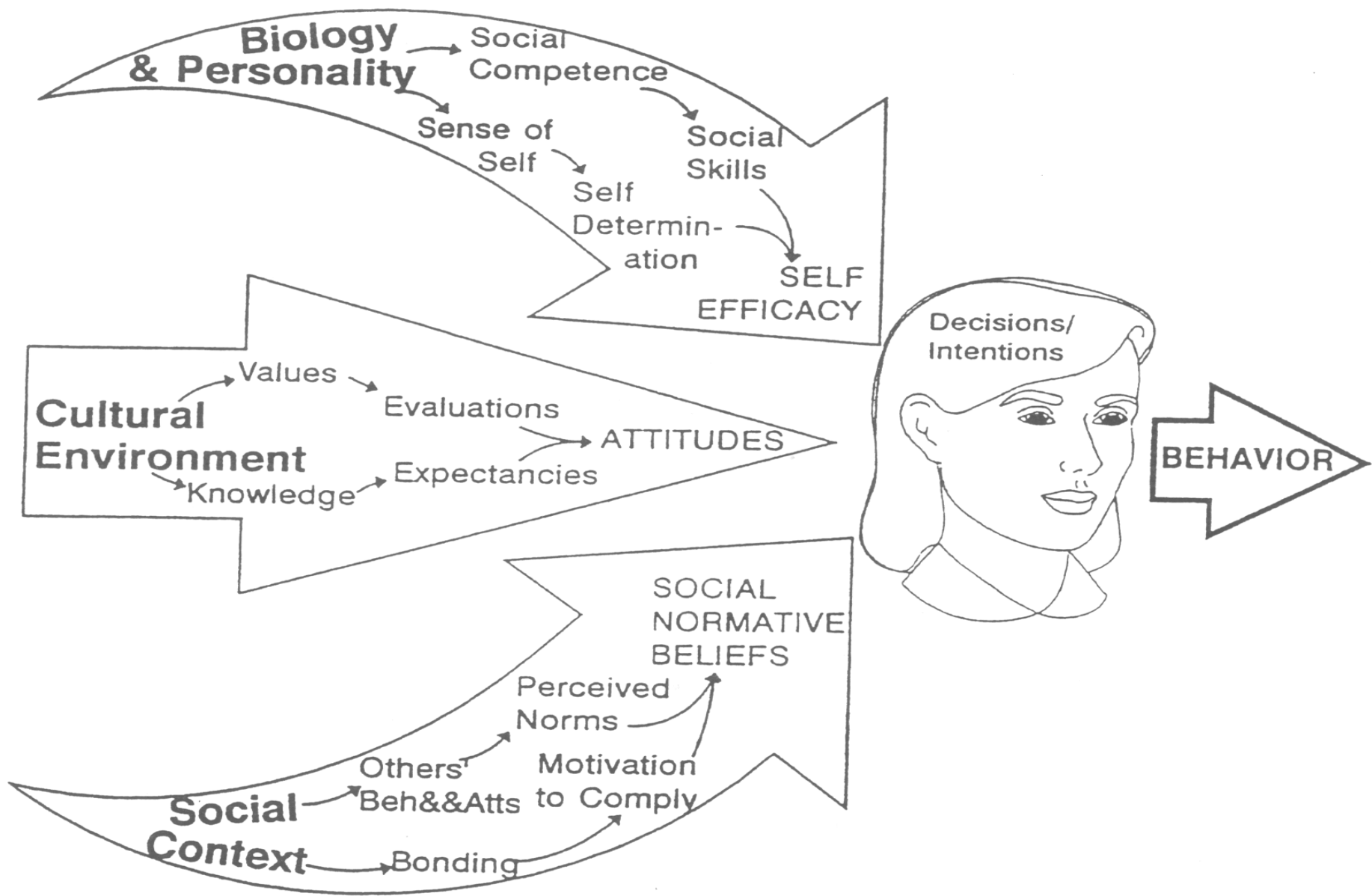


Figure 2. Three Streams of Influence on Health-related Behavior

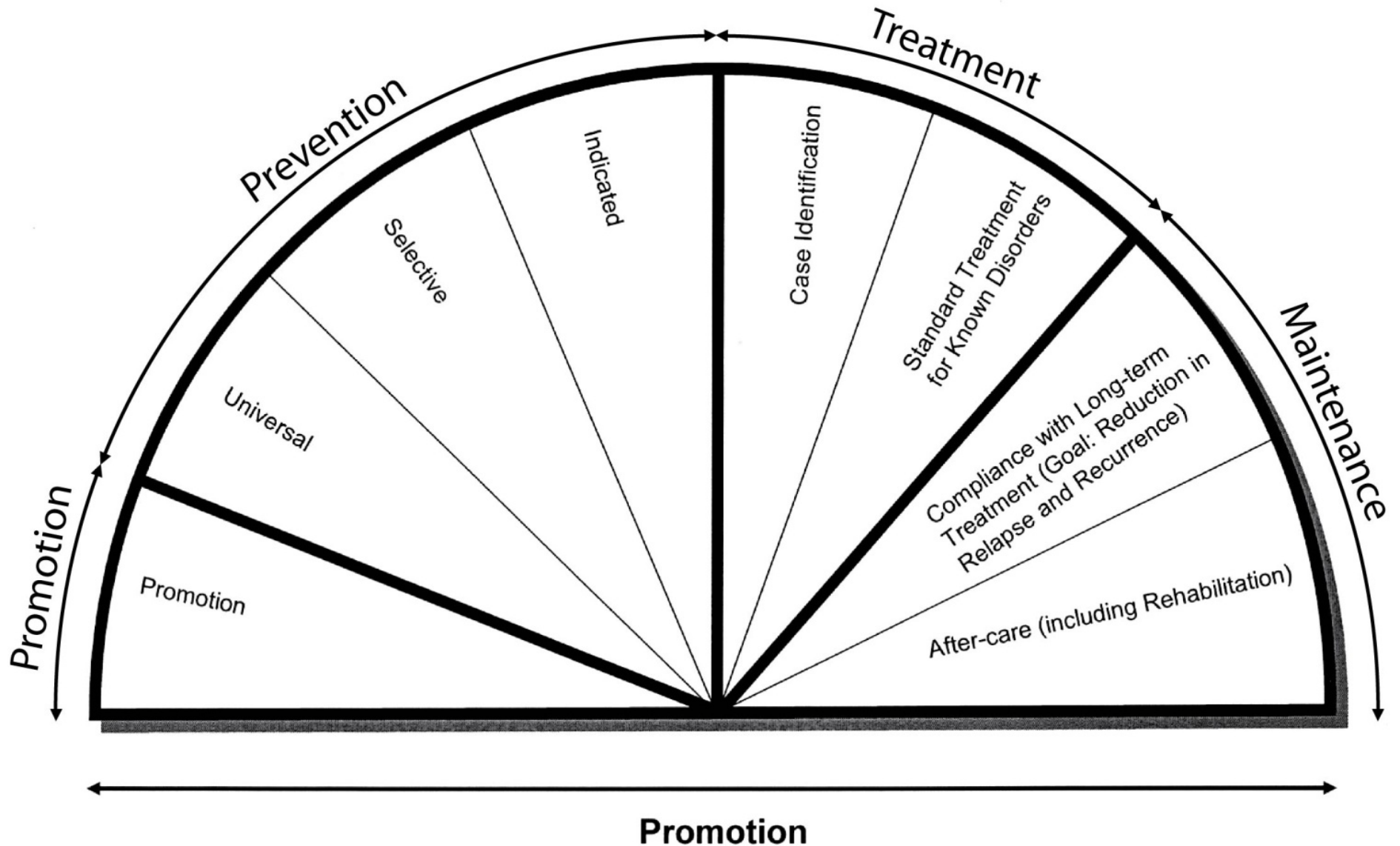
Public Mental Health

➤ Psychosocial Prevention

➤ Biotechnical Prevention

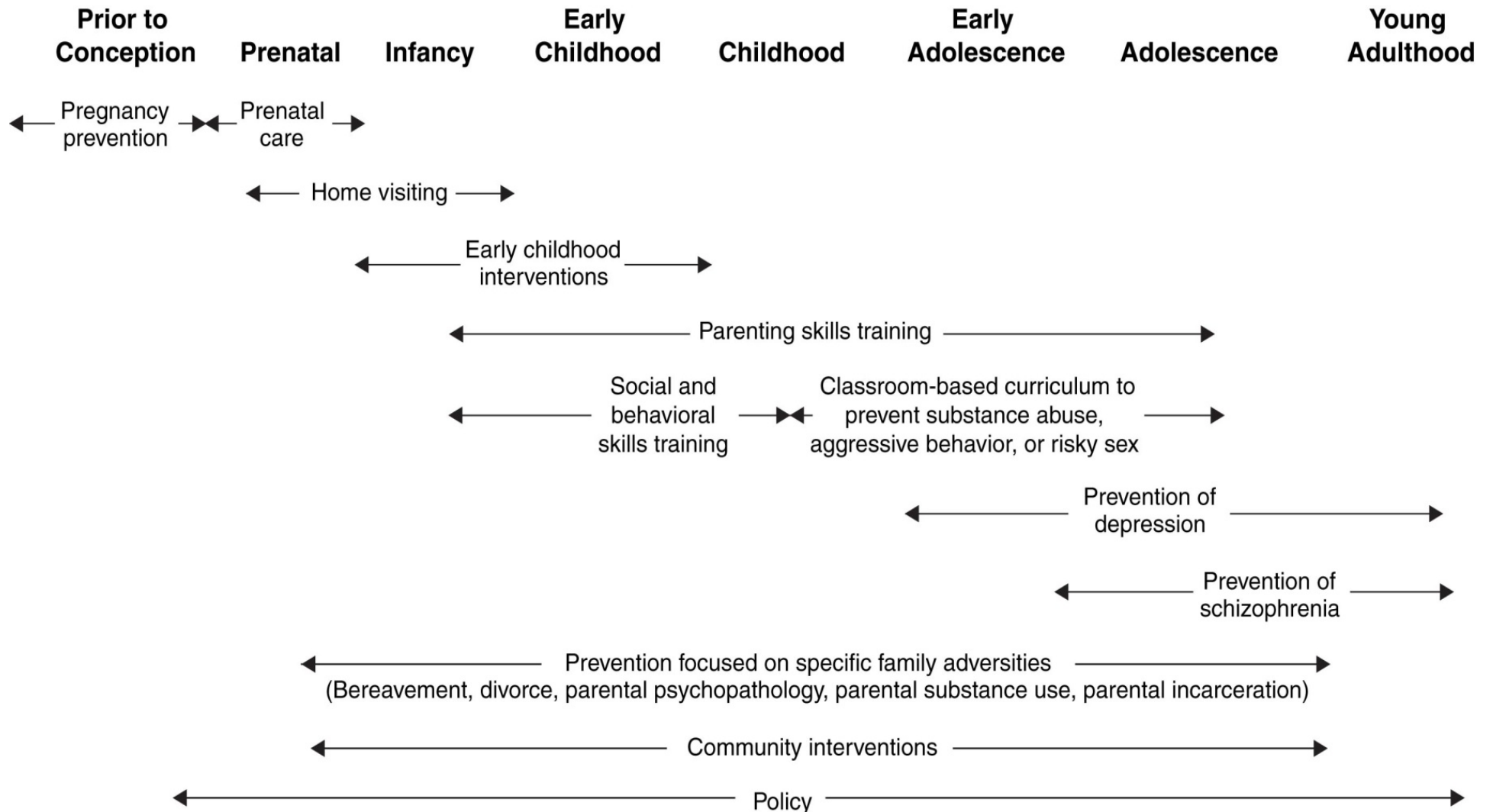
- E.g. seat belts, iodine in table salt, PKU tests, Clean Water, Polio shots,
- There is a possible biotechnical prevention intervention for Fetal Alcohol Spectrum Disorder – Choline 500mg BID; Folate 400umg BID.

Prevention AND Promotion



Preventive Intervention Opportunities

Interventions by Developmental Phase



Specific Preventive Interventions in Children at the Individual and Group Level

- Fetal Alcohol Spectrum Disorders
- Psychosocial Prevention of School Failure
- Psychosocial prevention of Antisocial and Delinquent Behavior
- Parenting Programs
- Prevention of Depression
- Prevention of Risky Sexual Behaviors
- Prevention of Trauma and Stressor-Related Disorders in Youth

Prevalence of Fetal Alcohol Spectrum Disorders – U.S.

- May et al. *Prevalence & Characteristics of Fetal Alcohol Spectrum Disorders*. *Pediatrics*, 2014, 134: 855-866.
 - Population study in a Midwestern community
 - Population = 160,000
 - Median income \$51,800
 - 11% below poverty
 - Surveyed 70% of 2,033 1st graders
 - 2.4 to 4.8% had FASD

Prevalence of Fetal Alcohol Spectrum Disorders – U.S.

- Susan Astley, Ph.D., & colleagues
 - rates of FASD in Washington state's foster care population were 10-15/1,000
- Dr. Pat Rojmahamongkol, et al
 - 17% of physicians correctly identified FAS
 - 74% were able to correctly identify Williams Syndrome
 - Williams Syndrome occurs in only 1/7,500.

Prevalence of Fetal Alcohol Spectrum Disorders – U.S.

➤ Chasnoff, et al

– 547 youth referred for severe behavioral disorders

- 50.6% African American
- 1.3% Asian
- 32.2% White
- 0.7% Native American
- 12.2% Biracial
- 3% Other/unknown

– **28.5%** of these youth had FASD

- 86.5% had never been diagnosed or were misdiagnosed
- 26.4% of these youth were misdiagnosed as having ADHD

Prevalence of Fetal Alcohol Spectrum Disorders – South Africa

- In a low SES, highly rural of South Africa in the Western Cape Province, FASD occurs in 182 – 259 per 1,000 children or 18-26 percent
 - May, et al “The continuum of fetal alcohol spectrum disorders in four rural communities in South Africa: Prevalence and characteristics.” *Drug and Alcohol Dependence* 159: 207 – 218

Prevalence of Fetal Alcohol Spectrum Disorders - Australia

- In a remote Aboriginal community of the Fitzroy Valley in Western Australia, FASD occurs in 120 per 1,000 children or 12 percent
 - Fitzpatrick et al, (2015) Prevalence of fetal alcohol syndrome in a population based sample of children living in remote Australia: The Lililwan* Project. *Journal of Paediatrics and Child Health* 51: 450-457.

Prevalence of Fetal Alcohol Spectrum Disorders - Russia

- The prevalence of FAS among adopted children from Eastern Europe/Russia) living in US 15 to 70/ 1,000
- Children Russian adoptees diagnosed ARND = 34%
- Records of alcohol-exposed pregnancy were significantly higher and constituted 19% to 41%
- Prospective adopting parents are concerned about the high risk of FASD among children adopted from Russia
 - Popova et al 2014. “What research is being done on prenatal alcohol exposure and fetal alcohol spectrum disorders in the Russian research community?” *Alcohol and Alcoholism* 49 (1): 85 – 95

Patients seen at JPH's Family Medicine
Clinic – Serving Community of 143,000
Median income \$33,809 & 95% Public Aid

Total patients with Neurodevelopmental Disorders	297 (49%)
Total Patients without Neurodevelopmental Disorders	314 (51%)
Total	611 (100%)

Patients seen at Jackson Park Hospital's Family Medicine Clinic

Number of adult and child patients with clinical profile consistent with Neurobehavioral Disorder Associated with Prenatal Alcohol Exposure (NDA-PAE)	237 (39%)
Number of adult patients <u>meeting strict criteria</u> for NDA-PAE	87 (14%)
Number of adult patients meeting strict criteria for NDA-PAE minus criterion A but <u>patients are almost certain mother was drinking</u>	40 (7%)
Number of adult patients meeting strict criteria for NDA-PAE minus criterion A – <u>no maternal history of drinking available</u>	97 (16%)

Patients seen at Jackson Park Hospital's Family Medicine Clinic

Number of child patients meeting strict criteria for neurobehavioral disorder associated with prenatal alcohol exposure	11 (2%)
Number of child patients meeting strict criteria for neurobehavioral disorder associated with prenatal alcohol exposure minus criteria A but collaterals are almost certain the patient's mother was drinking	2 (0.3%)

There was no author disagreement about the children's source of neurodevelopmental disorder

Patients seen at Jackson Park Hospital's Family Medicine Clinic

Number of ADULT patients with other types of Neurodevelopmental Disorders	45 (7%)
Number of ADULT patients where authors disagreed about the type of Neurodevelopmental Disorder	7 (1%)

Specific Preventive Interventions in Children at the Individual and Group Level Psychosocial Prevention of School Failure

ARTICLE

Effects of 2 Prevention Programs on High-Risk Behaviors Among African American Youth

A Randomized Trial

Brian R. Flay, DPhil; Sally Graumlich, EdD; Eisuke Segawa, PhD; James L. Burns, MS; Michelle Y. Holliday, PhD; for the Aban Aya Investigators

Objective: To test the efficacy of 2 programs designed to reduce high-risk behaviors among inner-city African American youth.

Design: Cluster randomized trial.

Setting: Twelve metropolitan Chicago, Ill, schools and the communities they serve, 1994 through 1998.

Participants: Students in grades 5 through 8 and their parents and teachers.

Interventions: The social development curriculum (SDC) consisted of 16 to 21 lessons per year focusing on social competence skills necessary to manage situations in which high-risk behaviors occur. The school/community intervention (SCI) consisted of SDC and school-wide climate and parent and community components. The control group received an attention-placebo health enhancement curriculum (HEC) of equal intensity to the SDC focusing on nutrition, physical activity, and general health care.

Main Outcome Measures: Student self-reports of vio-

lence, provocative behavior, school delinquency, substance use, and sexual behaviors (intercourse and condom use).

Results: For boys, the SDC and SCI significantly reduced the rate of increase in violent behavior (by 35% and 47% compared with HEC, respectively), provoking behavior (41% and 59%), school delinquency (31% and 66%), drug use (32% and 34%), and recent sexual intercourse (44% and 65%), and improved the rate of increase in condom use (95% and 165%). The SCI was significantly more effective than the SDC for a combined behavioral measure (79% improvement vs 51%). There were no significant effects for girls.

Conclusions: Theoretically derived social-emotional programs that are culturally sensitive, developmentally appropriate, and offered in multiple grades can reduce multiple risk behaviors for inner-city African American boys in grades 5 through 8. The lack of effects for girls deserves further research.

Arch Pediatr Adolesc Med. 2004;158:377-384

Chicago Public Schools CRADLE TO CLASSROOM

- Collaborative initiative with Chicago Public Health Department, six hospitals, & other agencies for pregnant & parenting teens
- Trains teens in the development of parenting skills and accessing community resources
- Provides teens access to prenatal, nutritional, medical, social, and child care services
- Provides counseling to new mothers around issues of domestic violence

Chicago Public Schools

CRADLE TO CLASSROOM

- Some 2000 teenagers in 54 Chicago schools that offer this program had babies in 2002. All 495 seniors graduated, and 78% of them enrolled in 2- or 4-year college programs.
- Only 5 of the women had a repeat pregnancy while still in school; 4 were graduating seniors, and the other, a junior, stayed in school. Eighty-five teen fathers also participated in the program, learning parenting skills under the supervision of a male mentor at each school.
- The program's annual budget was \$3.7 million

Specific Preventive Interventions in Children at the Individual and Group Level

Psychosocial prevention of Antisocial and Delinquent Behavior

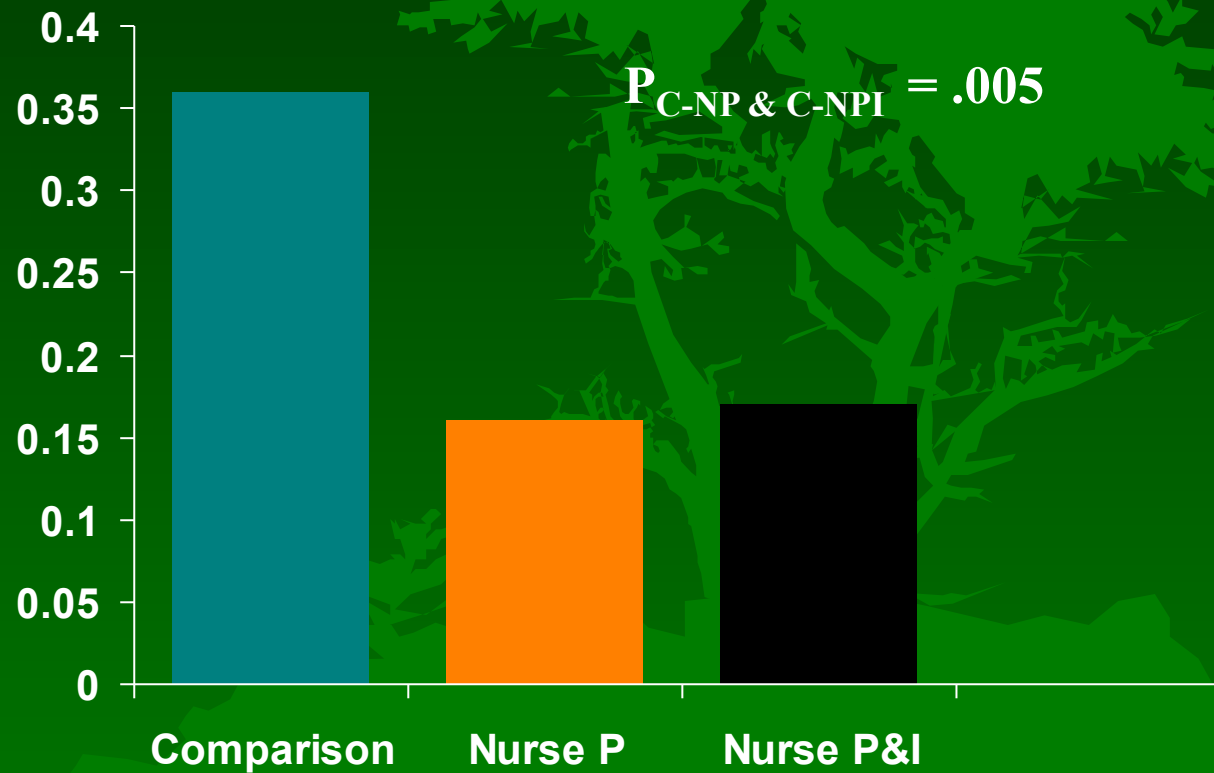
- **Nurse-Family Partnership**
- Pregnancy through infancy
- Focus on
 - Prenatal care
 - Maternal smoking
 - Mothering
 - Contraception
 - Work life



Nurse-Family Partnership

- Evaluated in three randomized trials for poor, teenager single mothers,
- Significant effects on
 - Abuse and neglect
 - Children's behavioral development
 - Mother's economic wellbeing
 - Time to next baby
 - Children's arrest as adolescent

Adjusted rates of arrests, 15-year olds, Elmira



Specific Preventive Interventions in Children at the Individual and Group Level Parenting Programs

- Positive Parenting Program—Triple P*
- A community-wide system of parenting supports that includes
 - brief media communications,
 - brief advice for specific problems, and
 - more extensive interventions when needed
- Multiple randomized trials showing benefit
- Including an RCT in 18 counties in South Carolina

A Good Behavior Game Results

OUTCOMES	STUDENT GROUPS	GBG CLASSROOM	STANDARD CLASSROOM
Drug abuse and dependence disorders	All Males	19%	38%
	Highly aggressive males	29%	83%
Regular smoking	All Males	6%	19%
	Highly aggressive males	0%	40%
Alcohol abuse and dependence disorders	All males and females	13%	20%
Antisocial personality disorder (ASPD)	Highly aggressive males	40%	100%
Violent and criminal behavior (and ASPD)	Highly aggressive males	34%	50%
Service use for problems with behavior, emotions, drugs or alcohol	All males	25%	42%
Suicidal thoughts	All females	9%	19%
	All males	11%	24%

Specific Preventive Interventions in Children at the Individual and Group Level Prevention of Depression

Internet-Based Depression Prevention over the Life Course: A Call for Behavioral Vaccines

Benjamin W. Van Voorhees, MD, MPH^{a,b,c,*}, Nicholas Mahoney^d,
Rina Mazo^d, Alinne Z. Barrera, PhD^e, Christopher P. Siemer, BS^d,
Tracy R.G. Gladstone, PhD^{f,g,h}, Ricardo F. Muñoz, PhDⁱ

KEYWORDS

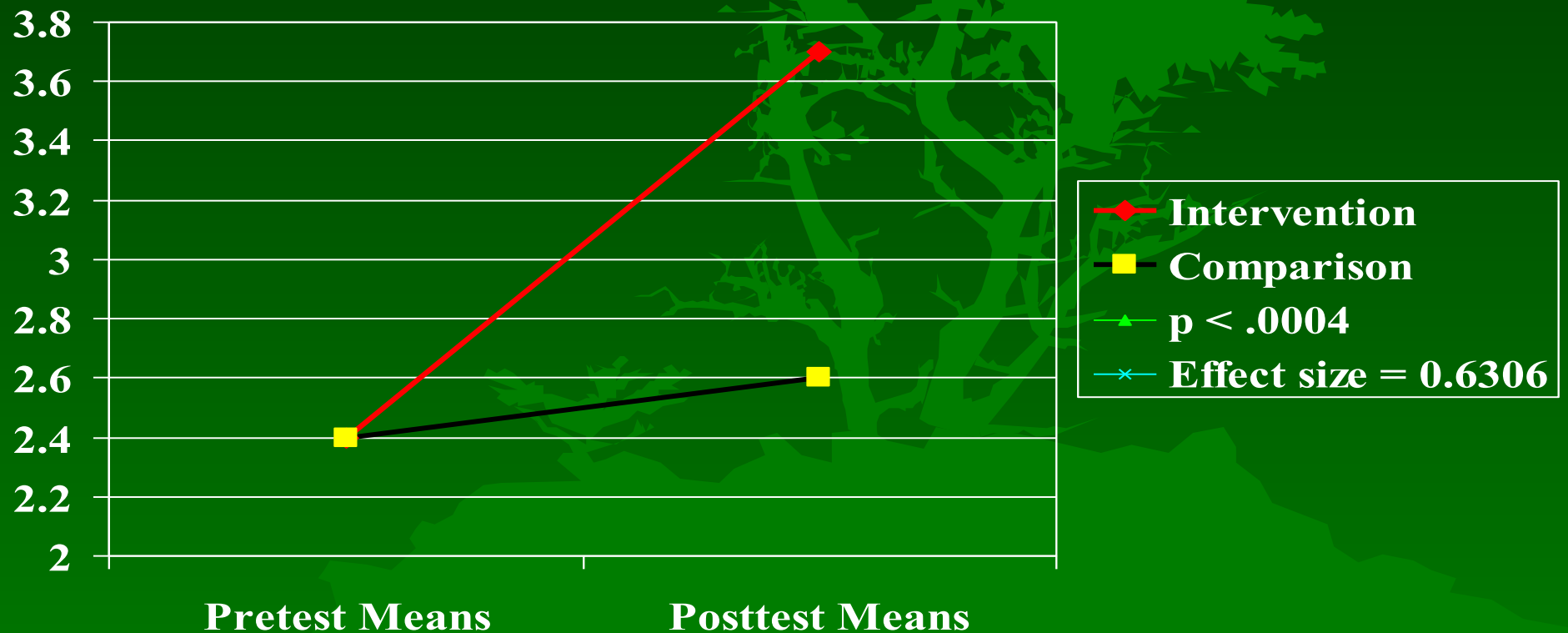
- Mental disorders • Prevention and control • Internet
- Intervention studies • Child

Specific Preventive Interventions in Children at the Individual and Group Level

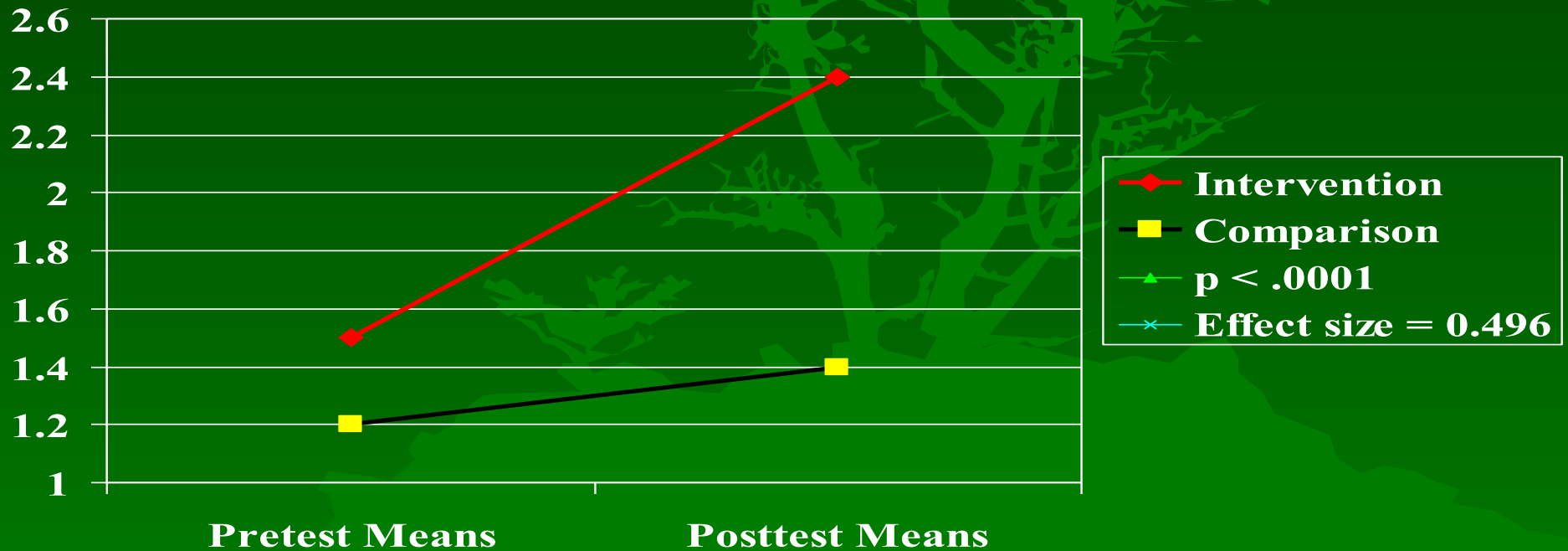
Prevention of Risky Sexual Behaviors

- Rebuilding the Village/Constructing Social Fabric
- Access to Modern and Ancient Technology
- Connectedness
- Social and Emotional Skills
- Self Esteem - Activities that create a sense of power; Activities that create a sense of connectedness; Activities that create a sense of models; Activities that create a sense of uniqueness
- Reestablish the Adult Protective Shield/Safety
- Minimize the Effects of Trauma/Mastery

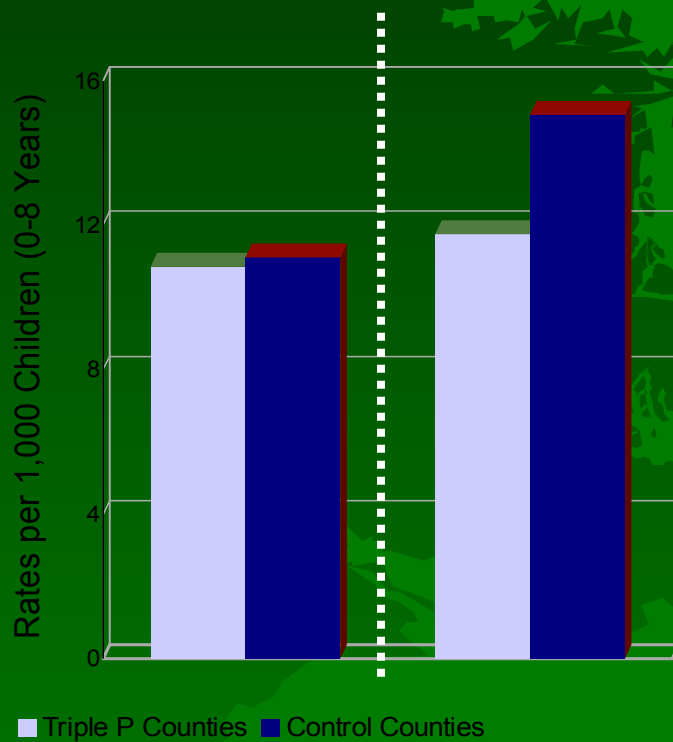
ADULT AIDS Transmission Knowledge



CHILD AIDS Transmission Knowledge



Substantiated Child Maltreatment



Before Triple
P

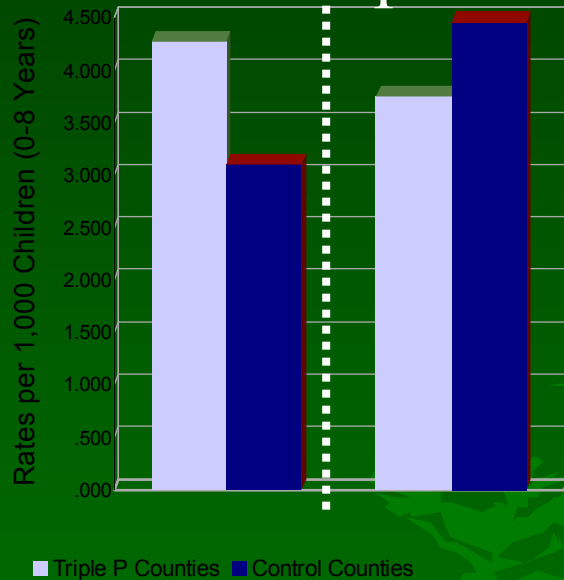
After Triple
P



Child Out-of-Home Placements

Before Triple P
P

After Triple P
P



Effect size = 1.22, $p < .01$, showing Triple P decreased medical injuries in counties using Triple P, compared to control counties not receiving Triple P increasing.



Strengthening Families 10-14

(Spoth et al., 2001)*

- Group-based parenting program for parents of early adolescents
- Effects up to six years later
 - Reduced tobacco, alcohol, & drug use—including methamphetamine use
 - Reduced delinquency
- Cost-effectiveness (Aos et al., 2004)
 - Savings of \$7.82 per dollar invested
 - Total savings of \$5,805 per youth



* Funded by NIDA

The Family Check-Up*

- Provides parenting support to families of adolescents via a family resource center in middle schools
- Effects as much as *five years later*
 - Reduced substance use
 - Fewer arrests
 - Better school attendance & academic performance
- Cost-effectiveness (Aos et al., 2004)
 - Savings of \$5.02 per dollar invested
 - Total savings of \$1,938 per youth



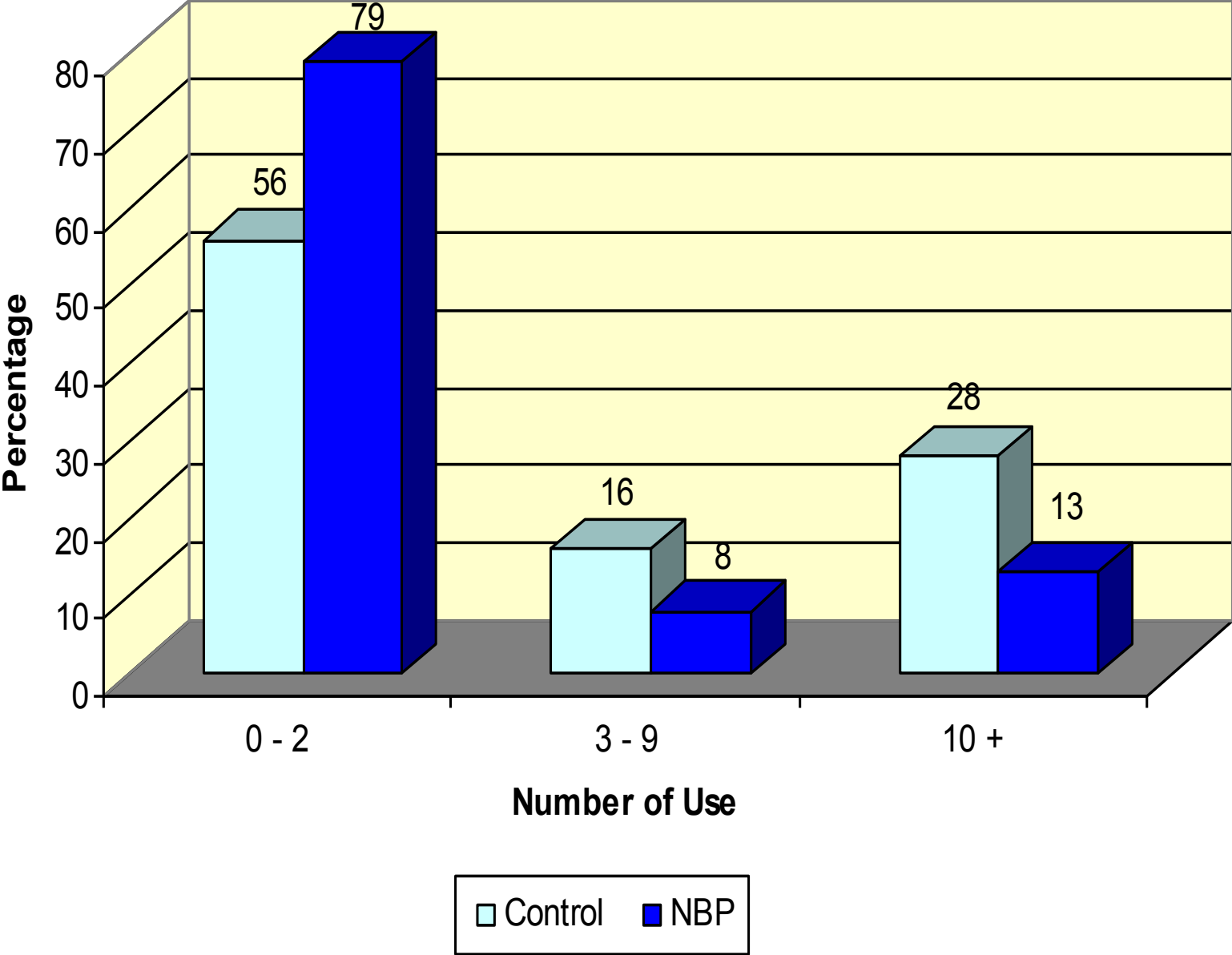
* Funded in part by NIDA

New Beginnings Program (NBP)



- Small group program for divorcing families
- Emphases on learning new skills and applying them in the family

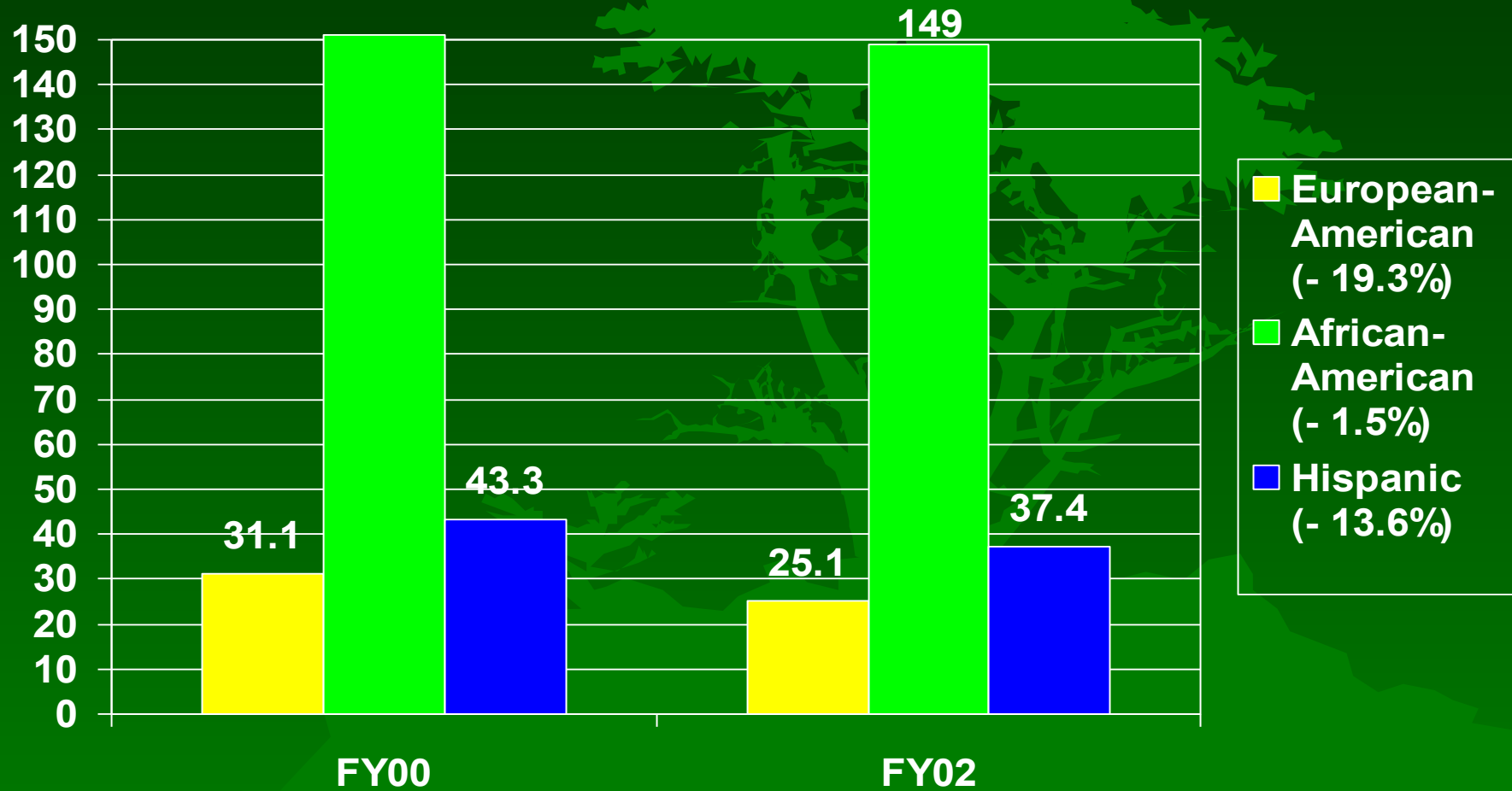
Marijuana Use -- Last 12 Months



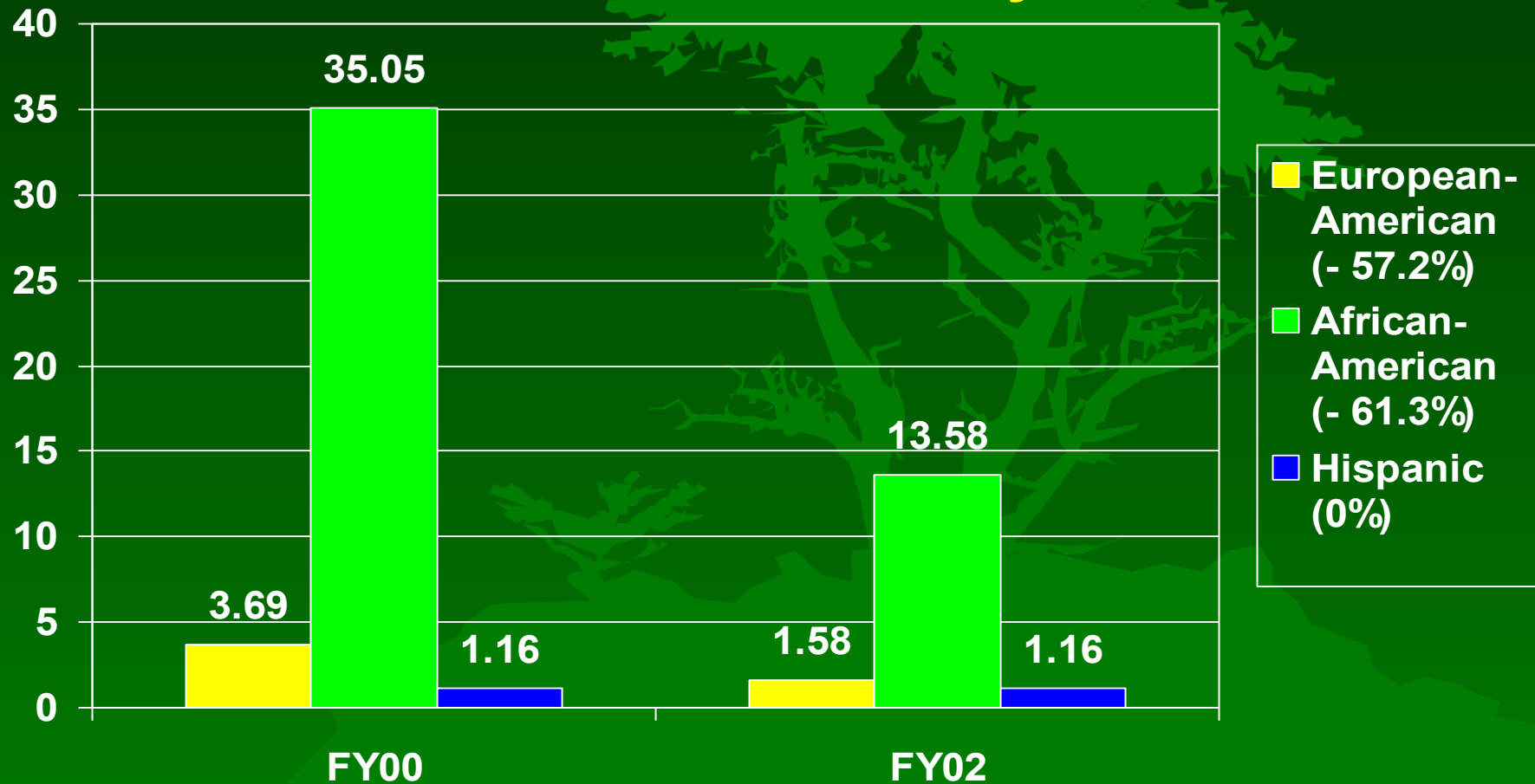
CMHC's Work in McLean County, Illinois

- In 1999, the Illinois Department of Children and Family Services learned there was a problem in child protective services in McLean & Peoria counties in Illinois
- In 1999, the average rate of removal of children from their families was 4/1,000.
- In 1999, in McLean and Peoria counties in Illinois, the average rate of removal of children from their families was 35 - 40/1,000.
- By 2000, in McLean and Peoria counties in Illinois, the official rate of removal of children from their families was 25/1,000.

Outcomes in McLean County FY00 through FY02 Reported Abuse and Neglect by Race



Outcomes in McLean County FY00 through FY02 Children Removed by Race



Illinois DCFS – 2011

- For years the removal of children from their homes has been 4/1,000.
- A few of years ago, the Directors of IDCFS were convinced to take a protective factor/ strength-based approach to families.
- IDCFS determined the neighborhoods in Illinois with the highest utilization of “child protective” services.
- IDCFS offered these communities “child welfare services” – the removal of children from their homes is 1.8/1,000 and in Cook County 0.8.

Specific Preventive Interventions in Children at the Individual and Group Level Prevention of Trauma and Stressor-Related Disorders in Youth

Infusing Protective Factors for Children in Foster Care

Gene Griffin, JD, PhD^{a,*}, Erwin McEwen, AM^b,
Bryan H. Samuels, MPP^c, Hayward Suggs, MS, MBA^d,
Juanita L. Redd, MPA, MBA^d, Gary M. McClelland, PhD^e

KEYWORDS

• Protective factors • Children • Foster care • Trauma

Risk factors are not predictive factors because of protective factors.
Carl Bell

In its report to Congress, the Fourth National Incidence Study of Child Abuse and Neglect¹ found that, during the study year of 2005 to 2006, approximately one child in every 58 in the United States was harmed by child abuse and neglect, whereas an estimated one in every 25 was endangered. The good news is that these statistics represent an improvement from the previous study.² The bad news is that during that year 1,256,600 children were harmed and 2,905,800 endangered.

Specific Preventive Interventions in Adults at the Individual and Group Level

Prevention of Trauma and Stressor-Related Disorders in Adults

- A sense of safety
- Calming
- A sense of self– and community efficacy
- Connectedness
- Hope
 - **Five Essential Elements of Immediate and Mid–Term Mass Trauma Intervention: Empirical Evidence** - Stevan E. Hobfoll, Patricia Watson, Carl C. Bell, et. al.



2008 Great Earthquake



Mass Trauma Intervention



Primary Resource: Hobfoll, S., Watson, P., Bell, C. C., et al. (2007). Five essential elements of immediate and mid-term mass trauma intervention: Empirical evidence. *Psychiatry: Interpersonal and Biological Processes*. 70(4), pp. 283-315.

2011年3月28日

災害時の心理的援助における5つの原則：
科学的根拠に基づいたコンセンサス

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精神保健学分野
准教授 島津明人

このレジュメは、Hobfoll et al. (2007) *Psychiatry*, 70, 283-315 の内容を邦訳し、その要点をまとめたものです。災害支援の方針作成や支援策の具体的計画などにお役立て下さい。

以下では、災害時の心理的援助に関して、科学的根拠にもとづく専門家のコンセンサスが得られた 5つの原則 がリストアップされています。これらの原則は、(1) 被災者個人の支援だけでなく、家族や地域などのコミュニティーの支援にも適用できること、(2) 災害発生直後の対応から、数ヶ月にわたる中期的な対応にも適用できること、の2点が特徴です。

これらの原則は、様々な災害（天災、人災）の支援に適応できるように作成されています。そのため、地震・津波による災害援助に関わる際には、現場の状況に合わせて適宜アレンジしながらご使用下さい。

Specific Preventive Interventions in Adults at the Individual and Group Level Prevention of First Episode Psychosis

Prevention of the First Episode of Psychosis

William R. McFarlane, MD^{a,b,*}

- Recovery After an Initial Schizophrenic Episode (RAISE) – John Kane New York.
 - Personalized Medication Management, family psychoeducation, resilience –focused individual therapy, & supported jobs and education – effect size 0.54 (quality of life)/0.42 overall symptoms.
- Australia RCT with Omega -3

Specific Preventive Interventions in Adults at the Individual and Group Level

Prevention of Postpartum Depression

- Depression is one of the most common illnesses complicating the postpartum period.
- Prevalence - 21.9% women in the 1st year after birth.
- Suicide is a major cause of perinatal maternal death.
- Adverse effects of postpartum depression on offspring occur during infancy to adolescence, including effects on emotion regulation, stress reactivity, and cognition

Specific Preventive Interventions in Adults at the Individual and Group Level

Prevention of Postpartum Depression

- Biologic factors that have consistently been found to be associated with increased risk of postpartum depression include experiencing depressed mood or anxiety during pregnancy, a past history of depression or premenstrual dysphoric disorder, and a family history of depression.
- Psychosocial factors, including stressful life events and lack of perceived social support predict postpartum depression

Specific Preventive Interventions in Adults at the Individual and Group Level

Prevention of Postpartum Depression

A woman with optimal resilience:

- Is protected from the effects of abrupt hormonal flux on key neurotransmitter systems
- Has excellent stress management skills
- Knows how to negotiate for social support
- Has a healthy eating pattern, including key nutrients

Specific Preventive Interventions in Adults at the Individual and Group Level

Prevention of Postpartum Depression

A woman with optimal resilience:

- Has at least 30 minutes of aerobic physical activity daily
- Gets enough light exposure during the day, and knows how to protect her sleep
- Breastfeeds if she desires
- Has babies when she wants to.

Specific Preventive Interventions in Adults at the Individual and Group Level

Prevention of Depression in Later Life

- Depressive episodes in older adults are prevalent & disabling - 6–10% in primary care settings), 30% in medical and long-term care settings
- Depression is associated with significant excess mortality after myocardial infarction, stroke, and cancer, and it is the major risk factor for suicide in old age

Specific Preventive Interventions in Adults at the Individual and Group Level

Prevention of Depression in Later Life

- Available treatments are only partially satisfactory in reducing symptom burden, sustaining remission and health-related quality of life, and in averting years lived with disability
- milder or subthreshold states increase the risk of developing the full clinical disorder but may be more reversible than the advanced clinical state and may be associated with neurobiological changes at an earlier and more modifiable stage of development

Specific Preventive Interventions in Adults at the Individual and Group Level

Prevention of Depression in Later Life

- the geriatric mental health workforce issues confronting the nation drive the imperative for devising effective, scalable, depression prevention models that can be implemented by general medical rather than mental health specialty clinicians
- preventing depression in older adults may be cost effective

Specific Preventive Interventions in Adults at the Individual and Group Level

Prevention of Depression in Later Life

- A randomized controlled prevention trial evaluating problem-solving therapy (PST) to prevent episodes of major depression, diminish disability, and improve health-related quality of life in adults on lower income who have risk factors for depression and are already living with mild symptoms of depression is currently under way.
- The control is a health education in dietary practices due to high rate of participant obesity.

Specific Preventive Interventions in Adults at the Individual and Group Level

Prevention of Depression in Later Life

- Relative to white participants in the trial, black participants have (1) lower household income and less formal years of education, (2) higher rates of health hazards (obesity, diabetes, hypertension), (3) higher rates of physical disability, and (4) more frequent histories of alcohol or substance abuse.
- About one-third of both blacks and whites report a remote prior history of major depressive episodes.

Specific Preventive Interventions in Adults at the Individual and Group Level

Prevention of Depression in Later Life

- Subjects are being followed for 2 years, with booster sessions of PST or health education every 6 months.
- Successful depression prevention research requires an infrastructure of community partnerships with primary care and social service agencies that reach the vulnerable populations most in need of preventive interventions.

Specific Preventive Interventions in Adults at the Individual and Group Level

Prevention of Major Neurocognitive Disorder

- Aggressive treatment of a Major Neurocognitive Disorder - Delirium prevents the development of a Major Neurocognitive Disorder – Dementia
- Benzodiazepines elderly people who used benzodiazepines for 3 months or longer had a 43 – 51% higher risk of later developing Alzheimer's
 - BMJ 2014; 349: g5205 doi: 10.1136/bmj.g5205

Social Determinants of Health

- Think about all the thriving liquor stores (food swamps) in the African-American (ghettos) and Native American (reservations) communities all over the country.
- The plethora of liquor stores have a determination on the indigenous populations' health and mental health.

Risk Factor - Culture Destroys

- Canada's monocultural ethnocentric culture had little value for First Nation culture.
- Thus, First Nation children were removed from their families and told them their culture was not acceptable, resulting in First Nation people having to give up their cultural protective factors which ultimately led to many First Native people engaging in the risky behaviors of suicide and intra-group homicide.

Risk Factor - Culture Destroys

- Within these communities, alcoholism is common and for every one child in Canadian juvenile detention centers without fetal alcohol syndrome there are 19 children with fetal alcohol spectrum disorders (Popova et al, 2011).
- Bell (2012) has proposed many disruptive behaviors leading to incarceration results from fetal alcohol exposure (FAE).

Risk Factor - Culture Destroys

- Fetal Alcohol Exposure is the leading cause of speech and language disorders, ADHD, Specific Learning Disorders, & Mild Mental Retardation which are often responsible for affect dysregulation leading to disruptive behaviors leading to incarceration.

Stratton et al. (1996). Fetal Alcohol Syndrome: Diagnosis, Epidemiology, Prevention, and Treatment. Washington, D.C. National Academy of Sciences, Institute of Medicine.

The Impact of Trauma Experiences on Risk Behaviors

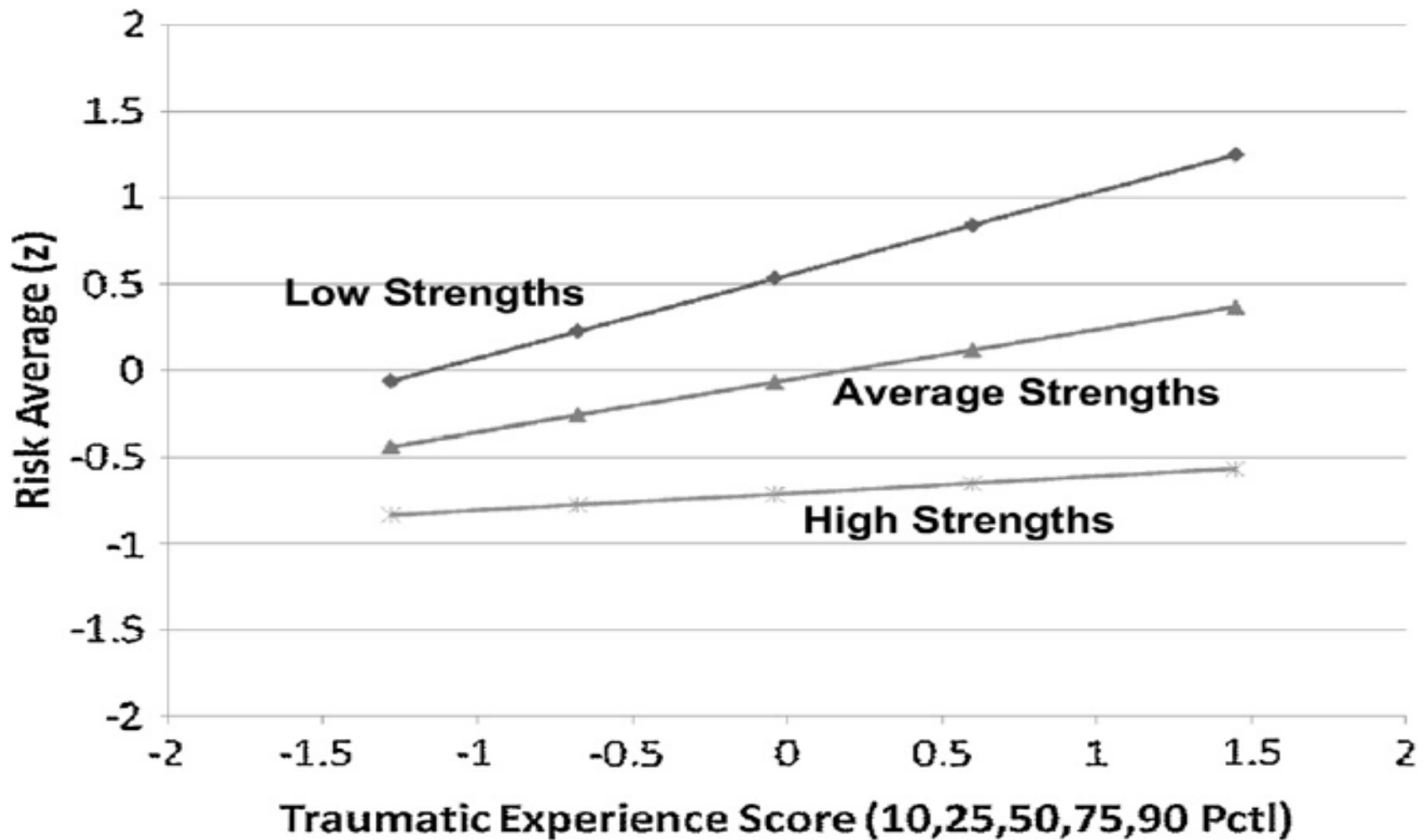
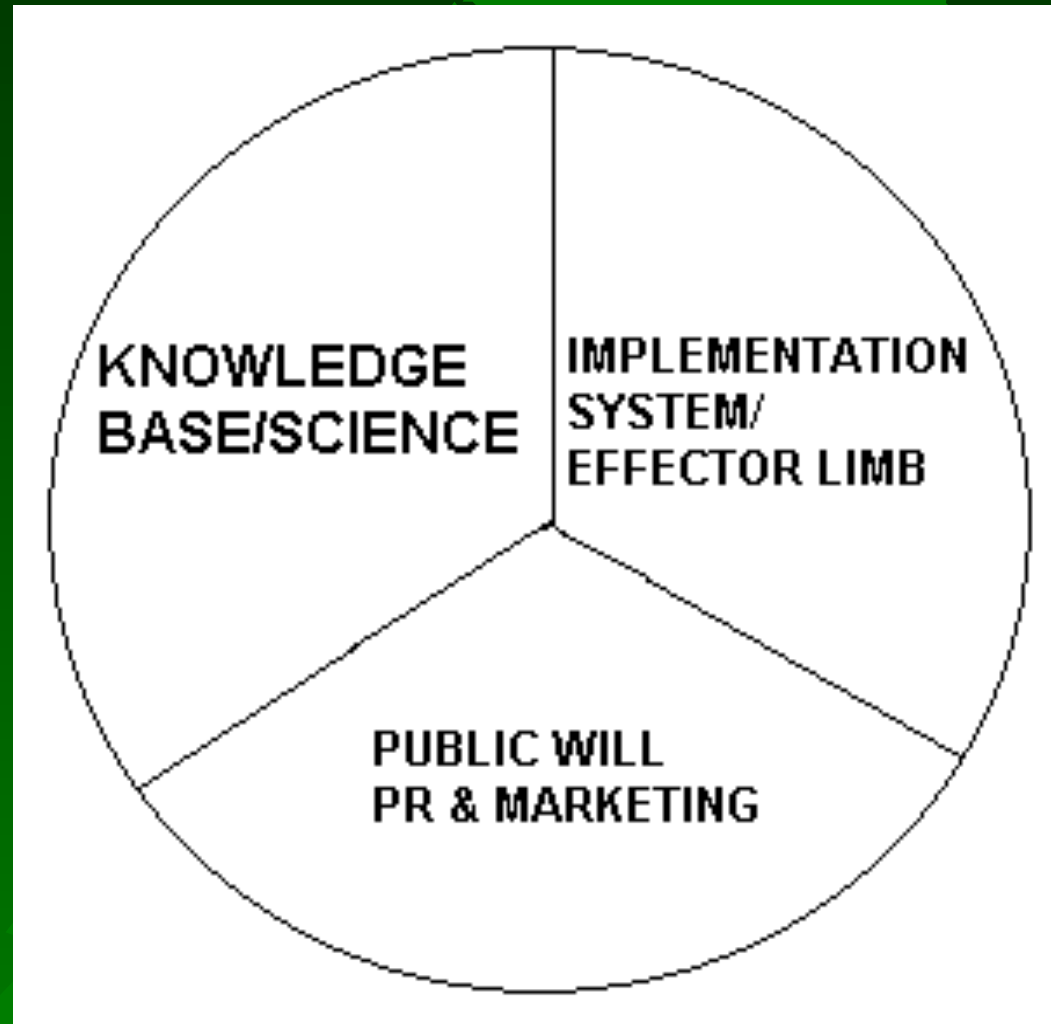


Fig. 3. Strengths moderate the relationship between trauma and risk behaviors.

Institutionalization and Sustainability



Risk Factors Are Not Predictive Factors Due To Protective Factors



Reforming Juvenile Justice: A Developmental Approach

Committee on Assessing Juvenile Justice Reform

Richard J. Bonnie, Robert L. Johnson, Betty M. Chemers, and Julie Schuck, *Editors*

Committee on Law and Justice

Division of Behavioral and Social Sciences and Education

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