

Social Sciences Colloquium

University of Montana

Missoula, MT

September 22, 2009

Overview of the Social Development Research Group

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Directors

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Survey Research Division Co-Directors

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Social Development Research Group

Mission

To understand and promote healthy behaviors and positive social development among children, adolescents, and young adults by...

Social Development Research Group

Mission (continued)

- conducting research on factors that influence development;
- testing the effectiveness of interventions;
- studying service systems and working to improve them;
- presenting science-based solutions to health and behavior problems; and
- disseminating knowledge produced by this research

Prevention Science Research Advances

Etiology/Epidemiology of Problem Behaviors

- Identify risk and protective factors that predict problem behaviors and describe their distribution in populations.

Efficacy Trials

- Design and test preventive interventions to interrupt causal processes that lead to youth problems.

Prevention Services Research

- Apply lessons learned about etiology and effective interventions in real world settings.



Community

Family

School

Individual/Peer

Risk Factors

| | Substance Abuse | Teen Delinquency | School Drop-Out | Pregnancy | Depression & Anxiety | Violence |
|---|-----------------|------------------|-----------------|-----------|----------------------|----------|
| Community | | | | | | |
| Availability of Drugs | ✓ | | | | ✓ | |
| Availability of Firearms | | | ✓ | | ✓ | |
| Community Laws and Norms Favorable Toward Drug Use, Firearms, and Crime | ✓ | ✓ | | | ✓ | |
| Media Portrayals | ✓ | | | | ✓ | |
| Transitions and Mobility | ✓ | ✓ | | ✓ | | ✓ |
| Low Neighborhood Attachment and Community Disorganization | ✓ | ✓ | | | ✓ | |
| Extreme Economic Deprivation | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Family | | | | | | |
| Family History of the Problem Behavior | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Family Management Problems | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Family Conflict | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Favorable Parental Attitudes and Involvement in the Problem Behavior | ✓ | ✓ | | | ✓ | |
| School | | | | | | |
| Academic Failure Beginning in Late Elementary School | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Lack of Commitment to School | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Individual/Peer | | | | | | |
| Early and Persistent Antisocial Behavior | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Alienation and Rebelliousness | ✓ | ✓ | | ✓ | | |
| Friends Who Engage in the Problem Behavior | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Favorable Attitudes Toward the Problem Behavior | ✓ | ✓ | ✓ | ✓ | | |
| Early Initiation of the Problem Behavior | ✓ | ✓ | ✓ | ✓ | ✓ | |

Understanding Factors that Influence Development

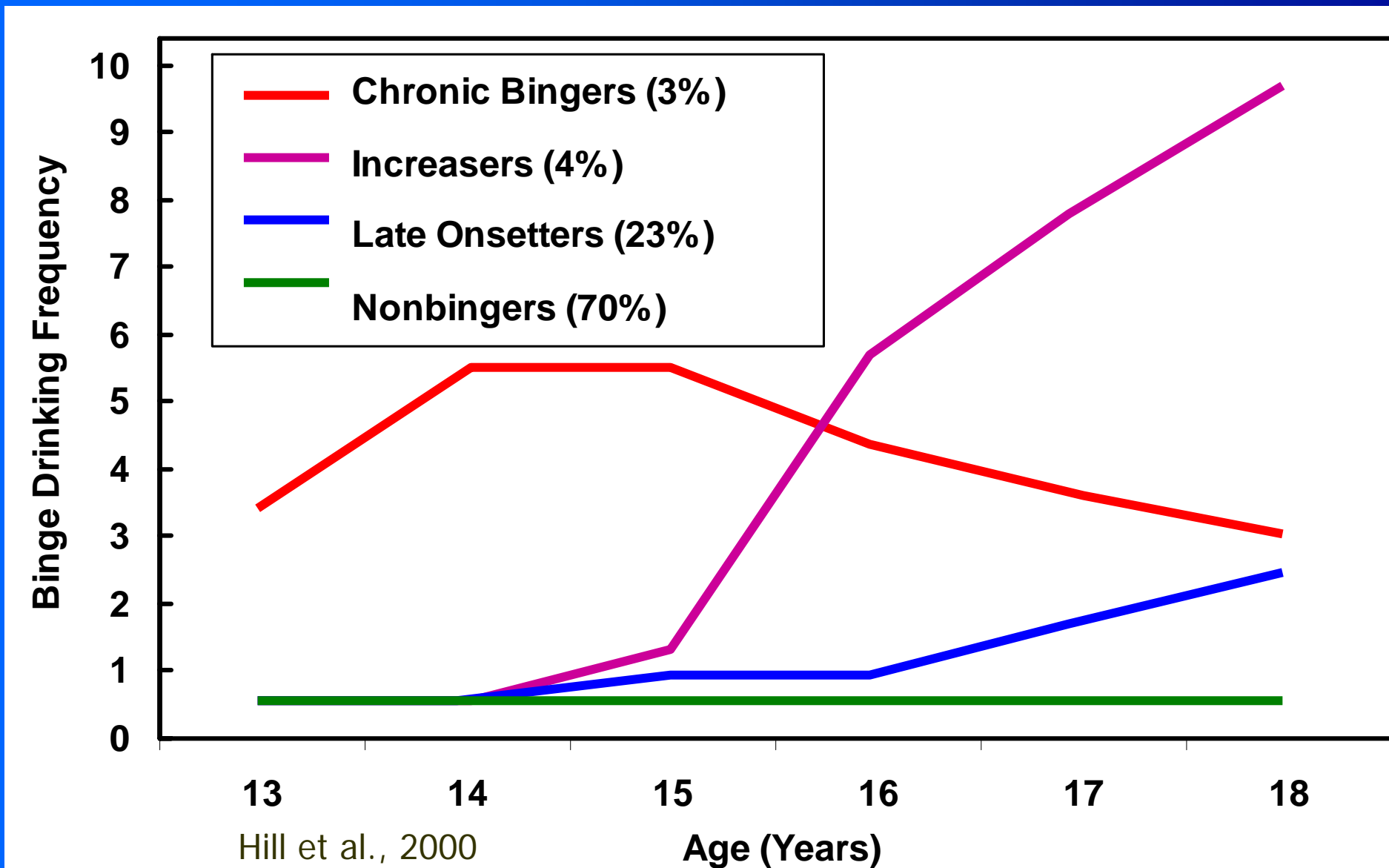
Identify Risk and Protective Factors that Predict Positive and Problem Behaviors

- SSDP Intergenerational Study
- Seattle Social Development Project
- Alcohol, Drug Abuse, Mental Health and Risky Sex in SSDP
- Raising Healthy Children
- International Youth Development Study
- Cross Cultural Families
- Rural Adolescent Psychopathology Study
- Exploring Health Disparities

Snowstorm: Extended Exposure to Positive Norms and Models of Problem Behavior without Protection Challenges without Protection



Illustration of Snowball and Snowstorm Patterns of Risk Using Binge Drinking Trajectories

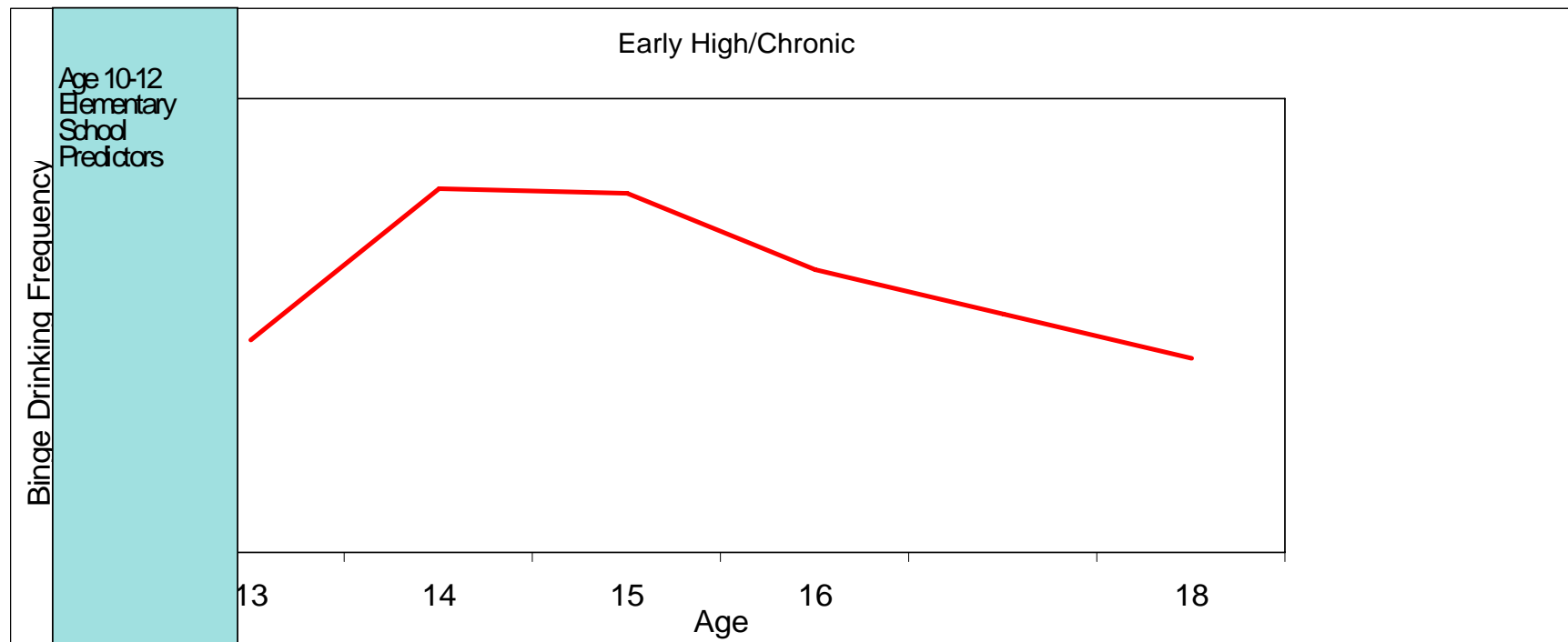


Both Early Chronic Bingers and Increasers had Problems **at Age 21**

- Early Chronic Bingers fewer completed high school, more were obese, and more had hypertension
- Increasers were more likely to have a diagnosis of alcohol abuse or dependence

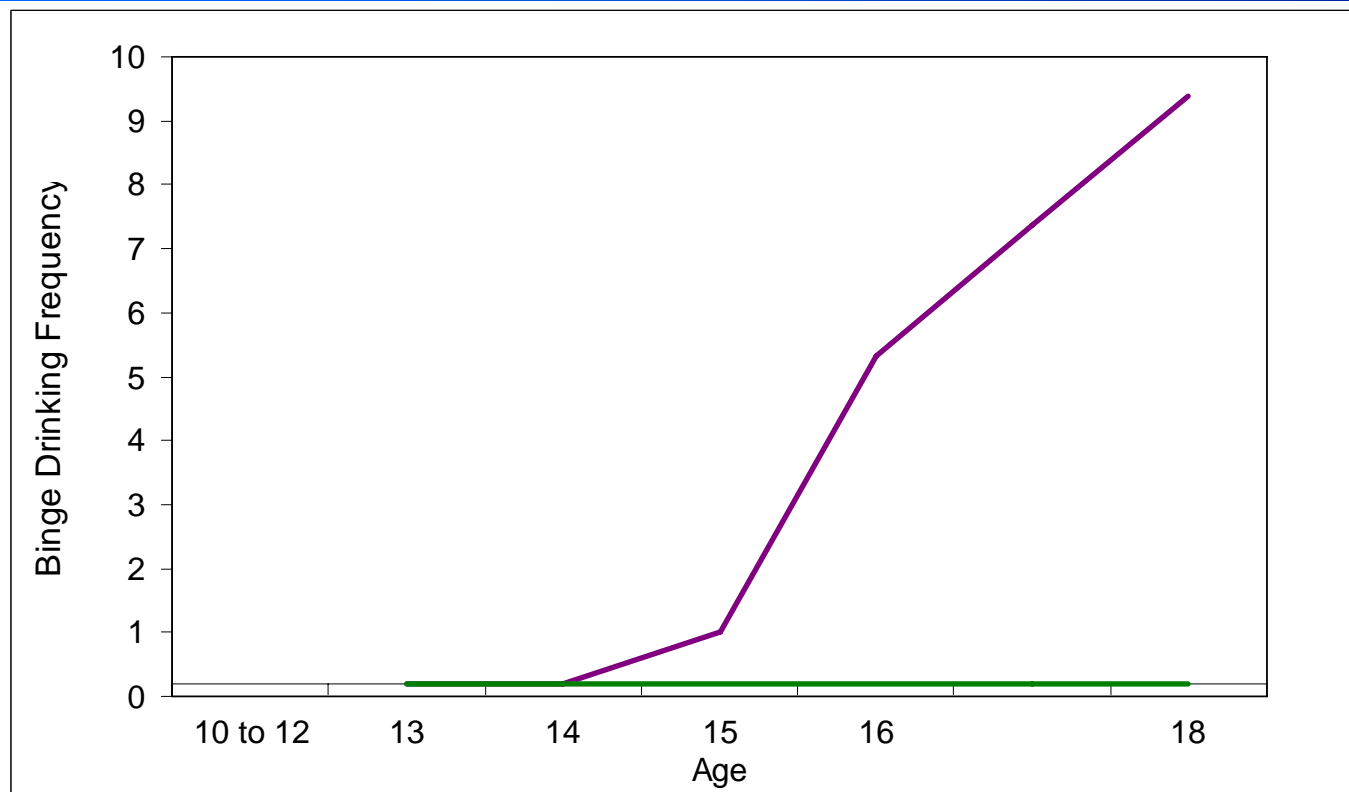
What Predicted Being a Early Chronic Binger?

Early Chronic Bingers had Snowball Pattern of Risk
Broad Array of Childhood Predictors (individual, family, school and peer)



What Predicted Being an Increaser type of Binge Drinker?

Increasers had Snowstorm Pattern of Risk-Predictors were Alcohol Availability, Friends Use, Favorable Attitudes



Prevention Implications of Binge Drinking Trajectories

- Both early chronic binge drinkers and increasers had later problems
- Implications of Snowball pattern of risk to prevent early chronic binge drinking
 - Intervene in childhood to reduce risk and enhance protection in multiple domains family, school, peer and individual
- Implications of Snowstorm pattern of risk to prevent increasers' binge drinking
 - Intervene in early adolescence to reduce positive norms and models of drinking and enhance

Prevention Science Research Advances

Etiology/Epidemiology of Problem Behaviors

- Identify risk and protective factors that predict problem behaviors and describe their distribution in populations.

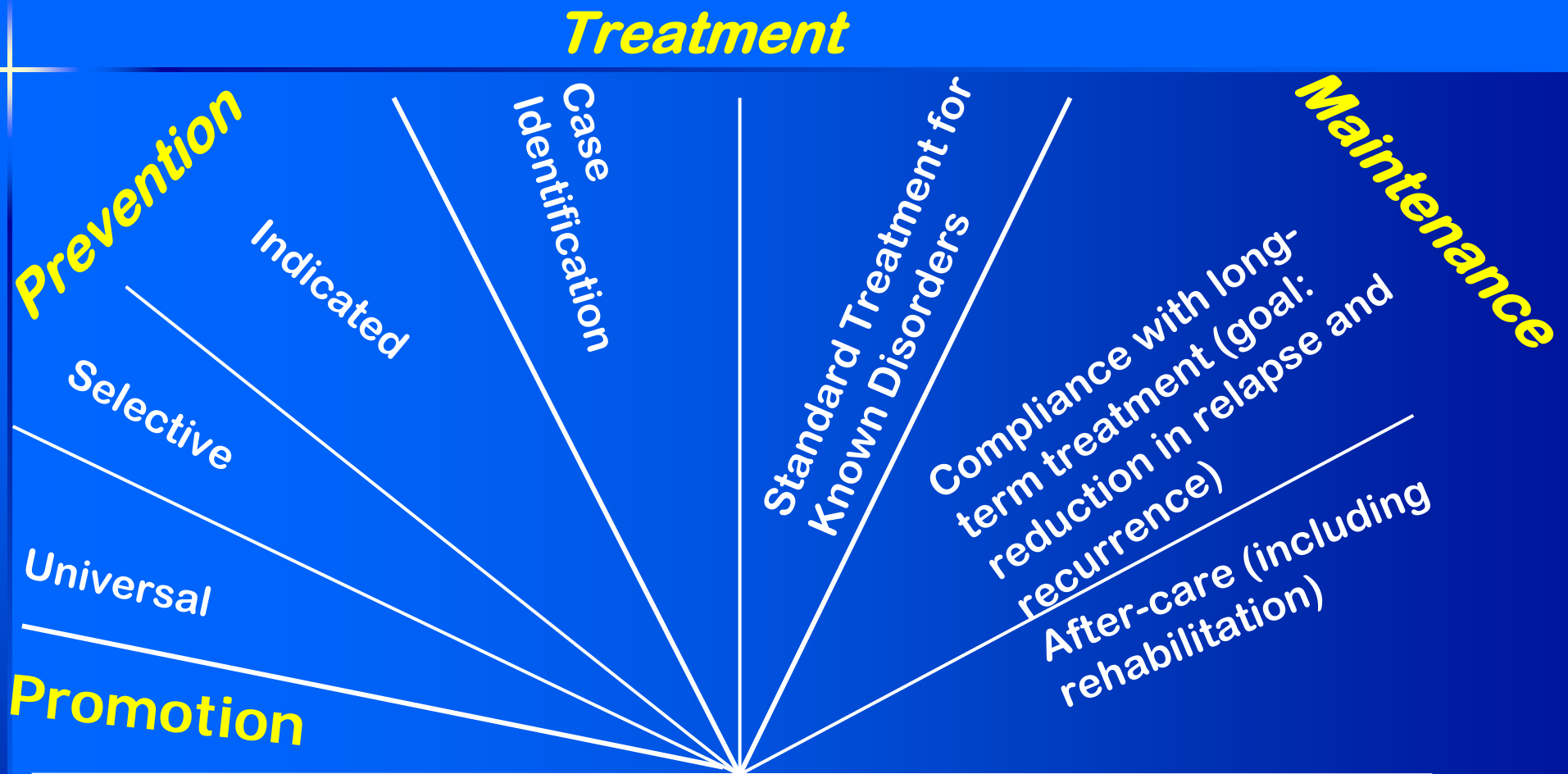
Efficacy Trials

- Design and test preventive interventions to interrupt causal processes that lead to youth problems.

Prevention Services Research

- Apply lessons learned about etiology and effective interventions in real world settings

Intervention Spectrum



Source: Institute of Medicine (2009). Preventing Mental, Emotional and Behavioral Disorders Among Young People. O'Connell, Boat & Warner (eds). Washington, DC: National Academies Press.

Testing Interventions

- Family-level interventions
 - Project Family
 - Family Connections
 - Focus on Families
 - Seattle Social Development Project
 - Raising Healthy Children
- School-level interventions
 - Seattle Social Development Project
 - Raising Healthy Children
- Community-level interventions
 - Community Youth Development Study

Twenty Five Years of Research on School Based Youth Development

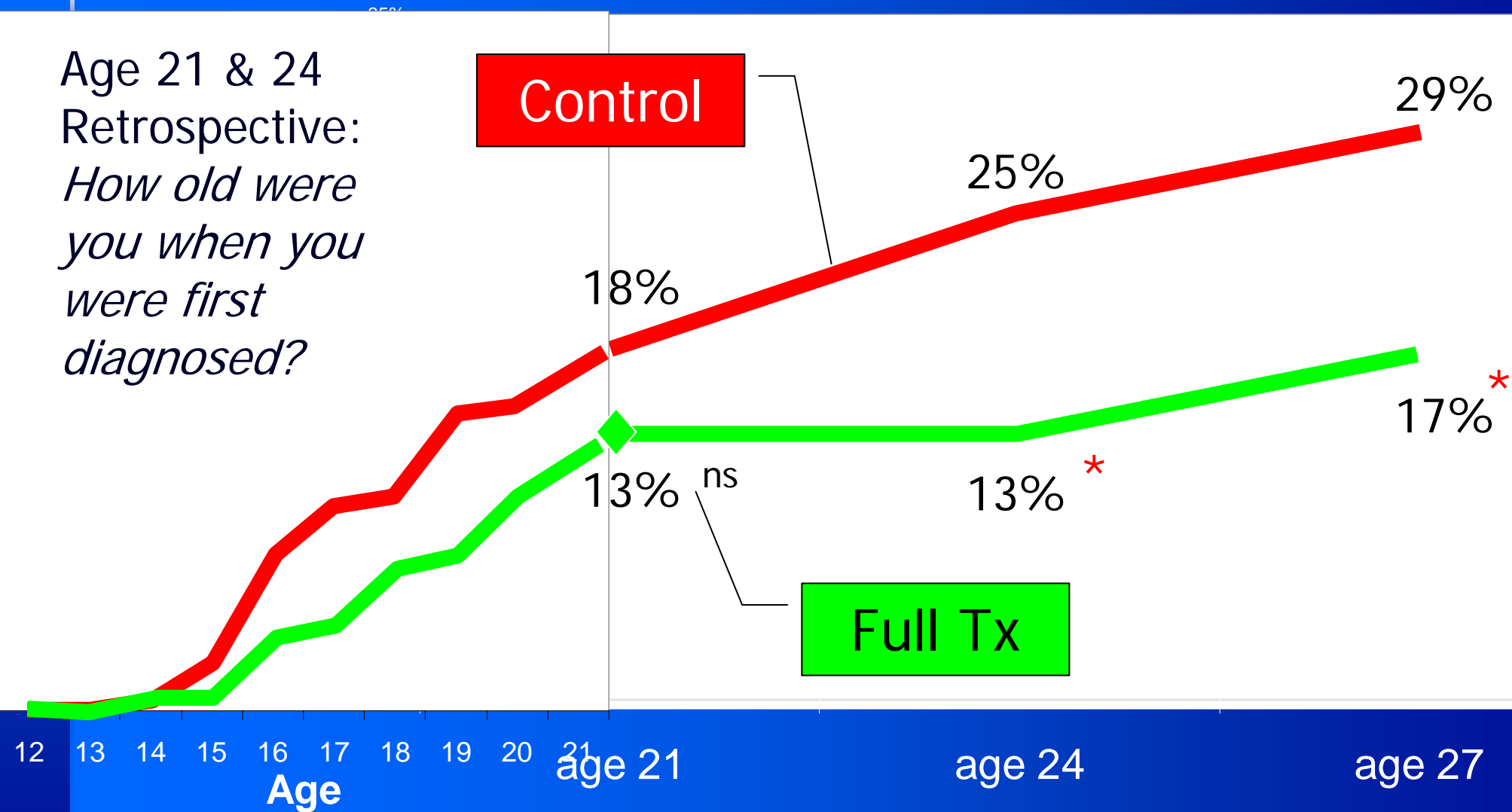
- 1981-present--Seattle Social Development Project in Seattle Public Schools
- 1985--1992--Raising Healthy Children in Renton Public Schools
- 1993-present--Raising Healthy Children in Edmonds Public Schools

Seattle Social Development Project Intervention Components

- Component One: *Teacher Training in Classroom Instruction and Management*
- Component Two: *Parent Training in Behavior Management and Academic Support*
- Component Three: *Child Social and Emotional Skill Development*

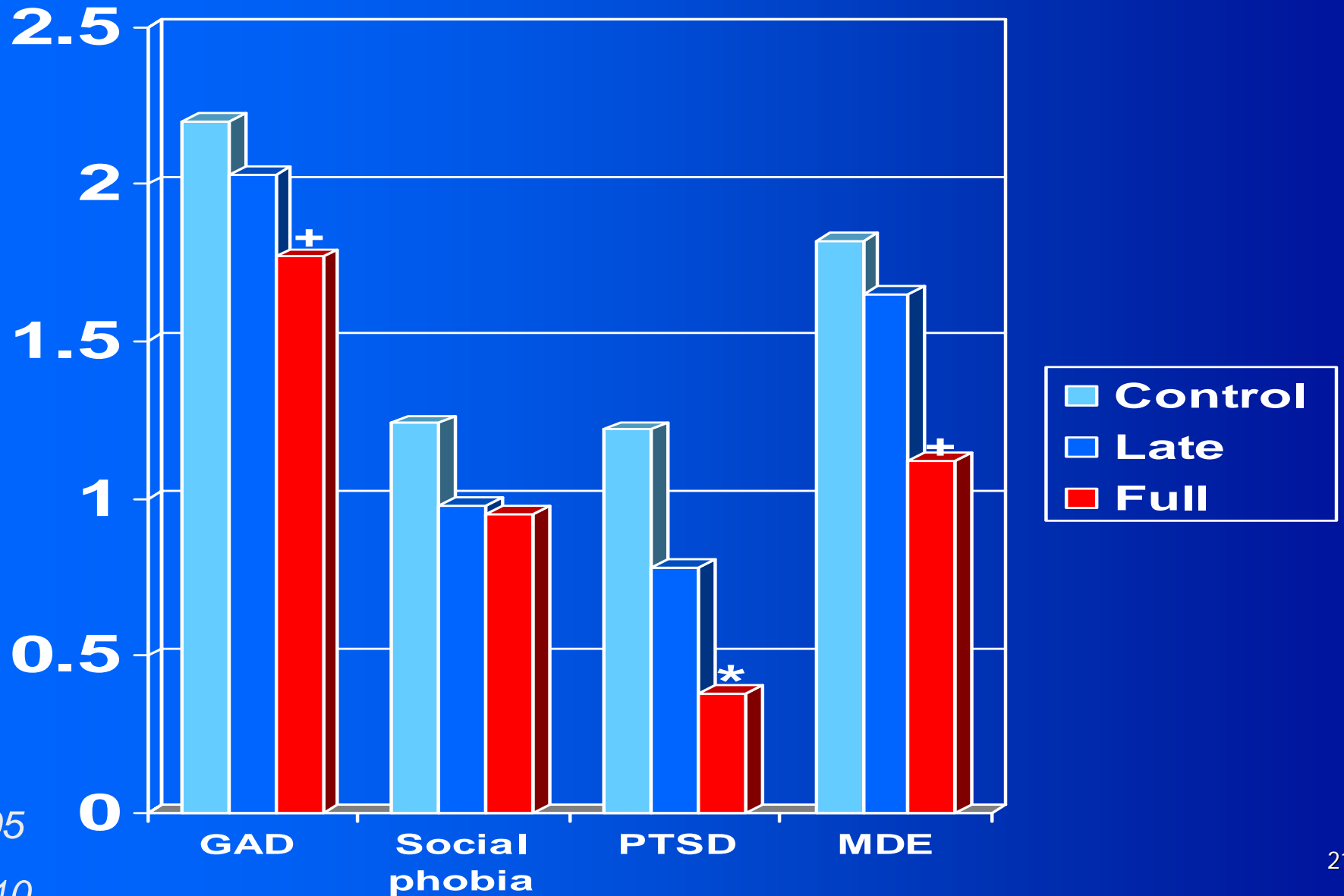
SSDP Effects at Ages 21, 24 and 27 on Lifetime STI Diagnosis

Age 21 & 24
Retrospective:
How old were you when you were first diagnosed?



* p < .05

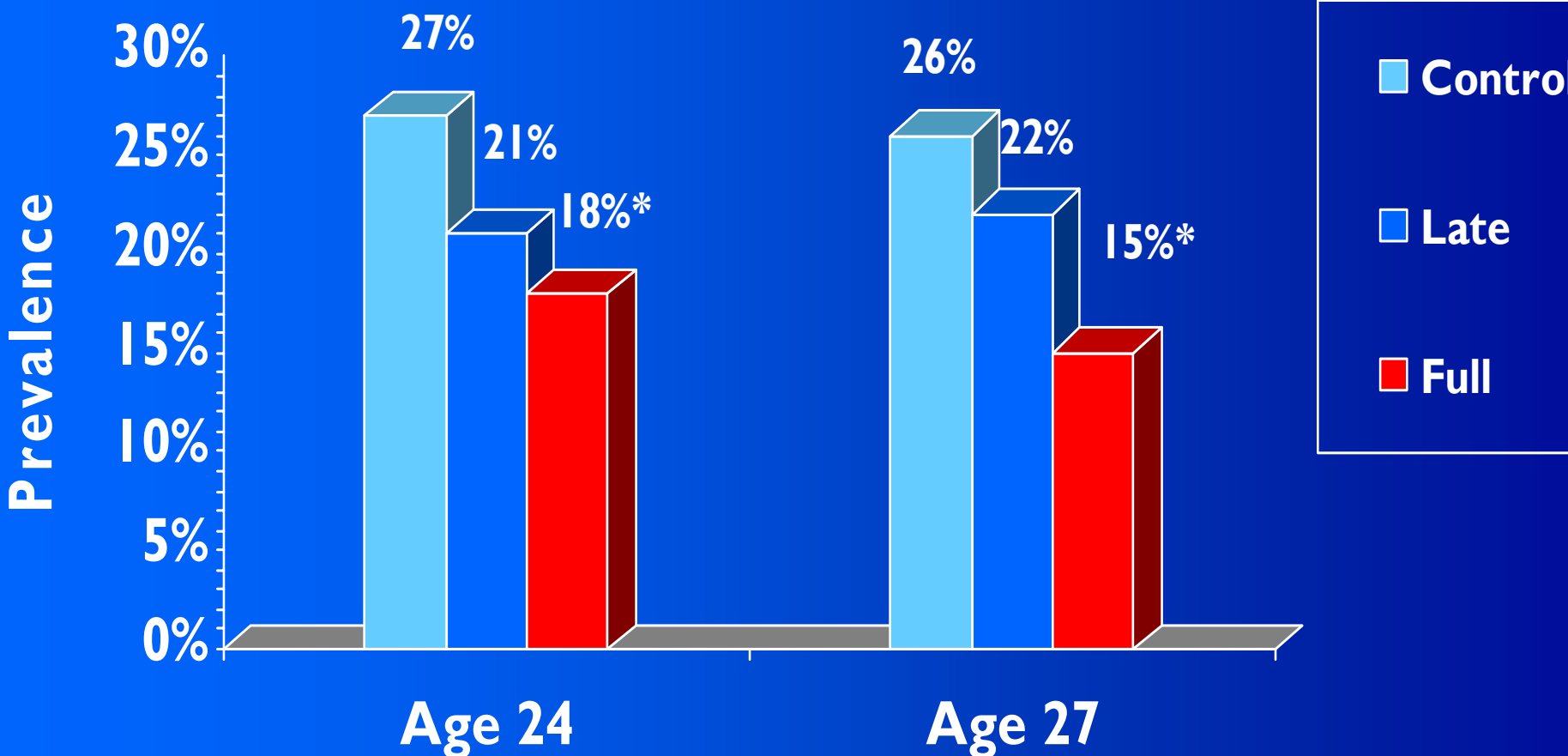
SSDP Age 27 Mental Health Symptom Criterion Count



* $p < .05$

+ $p < .10$

SSDP: Proportion Who Met Criteria for GAD, Social Phobia, MDE, or PTSD Diagnosis at Ages 24 and 27



* $p < .05$

Prevention Science Research Advances

Etiology/Epidemiology of Problem Behaviors

- Identify risk and protective factors that predict problem behaviors and describe their distribution in populations.

Efficacy Trials

- Design and test preventive interventions to interrupt causal processes that lead to substance abuse and other problems.

Prevention Services Research

- Apply lessons learned about etiology and efficacious interventions in real world settings.

Improving Service Systems

- Apply lessons learned about etiology and effective interventions to prevention service systems
 - Diffusion
 - Community Youth Development Study
 - Seattle Schools Implementation of CTC
 - Washington State Division of Alcohol and Substance Abuse

There are Efficacious Interventions, But...

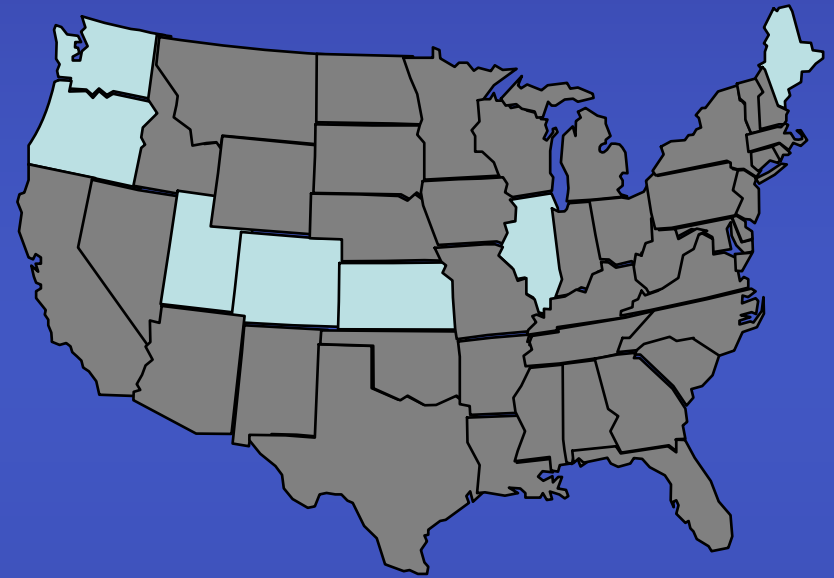
- **Prevention approaches that do not work or have not been evaluated have been more widely used than those shown to be effective.**

(Gottfredson et al 2000, Hallfors et al 2000, Hantman et al 2000, Mendel et al 2000, Silvia et al 1997; Smith et al 2002)

Challenges for States and Communities in Using Prevention Science

- Matching tested, effective programs to local need
- Tested, effective programs/systems compete with “best practice” or usual practice
- Tested, effective programs require training, technical assistance, and monitoring to be delivered with fidelity

The Community Youth Development Study: Testing Communities That Care



Funded by:

National Institute on Drug Abuse

Center for Substance Abuse Prevention

National Cancer Institute

National Institute on Child Health and Development

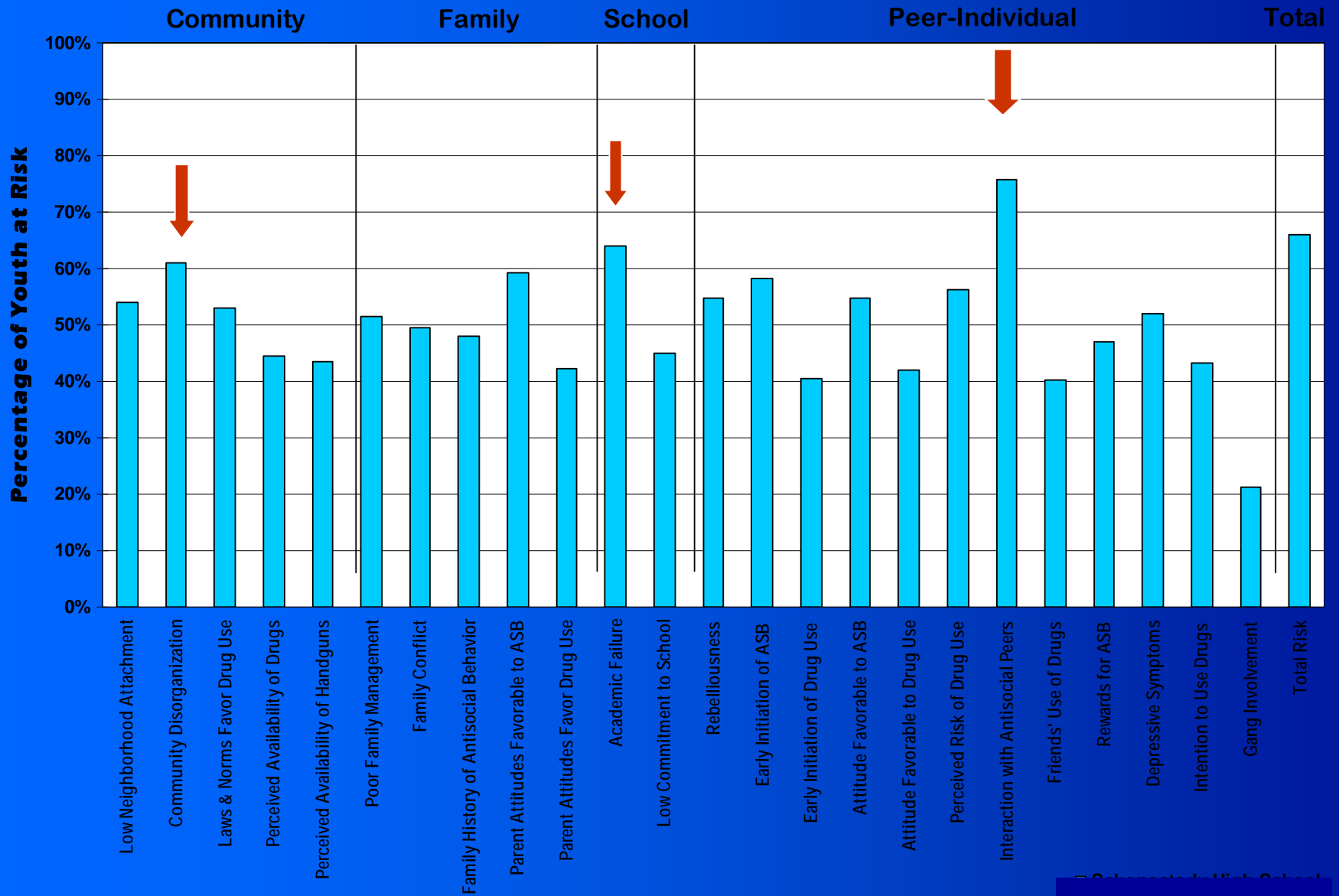
National Institute on Mental Health

The Communities That Care Operating System




School A

2005 Risk Profile




Protective Factors

Individual/Peer Domain

| Risk Factor Addressed | Program Strategy | Healthy Beliefs & Clear Standards | Bonding | Opport. | Skills | Recog. | Developmental Period |
|--|--|-----------------------------------|---------|---------|--------|--------|----------------------|
| Rebelliousness | Family Therapy | ☐ | ☐ | ☐ | ☐ | ☐ | 6-14 |
| | Classroom Curricula for Social Competence Promotion | ☐ | ☐ | ☐ | ☐ | ☐ | 6-14 |
| | School Behavior Management Strategies | ☐ | | ☐ | | ☐ | 6-14 |
| | Afterschool Recreation | ☐ | ☐ | ☐ | ☐ | ☐ | 6-10 |
| | Mentoring with Contingent Reinforcement | ☐ | | ☐ | | ☐ | 11-18 |
| | Youth Employment with Education | ☐ | ☐ | ☐ | ☐ | ☐ | 15-18 |
| Friends Who Engage in the Problem Behavior  | Parent Training | ☐ | ☐ | ☐ | ☐ | ☐ | 6-14 |
| | Classroom Curricula for Social Competence Promotion | ☐ | ☐ | ☐ | ☐ | ☐ | 6-14 |
| | Afterschool Recreation | ☐ | ☐ | ☐ | ☐ | ☐ | 6-14 |
| | Mentoring with Contingent Reinforcement | ☐ | | ☐ | | ☐ | 11-18 |
| Favorable Attitudes Toward the Problem Behavior | Classroom Curricula for Social Competence Promotion | ☐ | ☐ | ☐ | ☐ | ☐ | 6-14 |
| | Community/School Policies | | | | | | |
| Early Initiation of the Problem Behavior | Parent Training | ☐ | ☐ | ☐ | ☐ | ☐ | 6-14 |
| | Classroom Organization Management and Instructional Strategy | ☐ | ☐ | ☐ | ☐ | ☐ | 6-10 |
| | Classroom Curricula for Social Competence | ☐ | ☐ | ☐ | ☐ | ☐ | 6-14 |
| | Community/School Policies | ☐ | | | | | all |
| Constitutional Factors | Prenatal/Infancy Programs | ☐ | ☐ | ☐ | ☐ | ☐ | prenatal-2 |

Classroom Curricula for Social and Emotional Competence Promotion - Elementary School

- 
- (PATHS[®]) Promoting Alternative Thinking Strategies (Greenberg et al., 1995)
 - The Social Relations Intervention Program (Lochman et al., 1993)
 - Peace Builders (Krug et al., 1997)
 - Know Your Body (Resnicow et al., 1992)

Classroom Curricula for Social and Emotional Competence Promotion - Elementary School

- Metropolitan Area Child Study (Huesmann et al., 1996)
- Second Step: A Violence Prevention Curriculum (Grossman et al. 1997)
- The Children of Divorce Intervention Program (Pedro-Carroll et al., 1992)

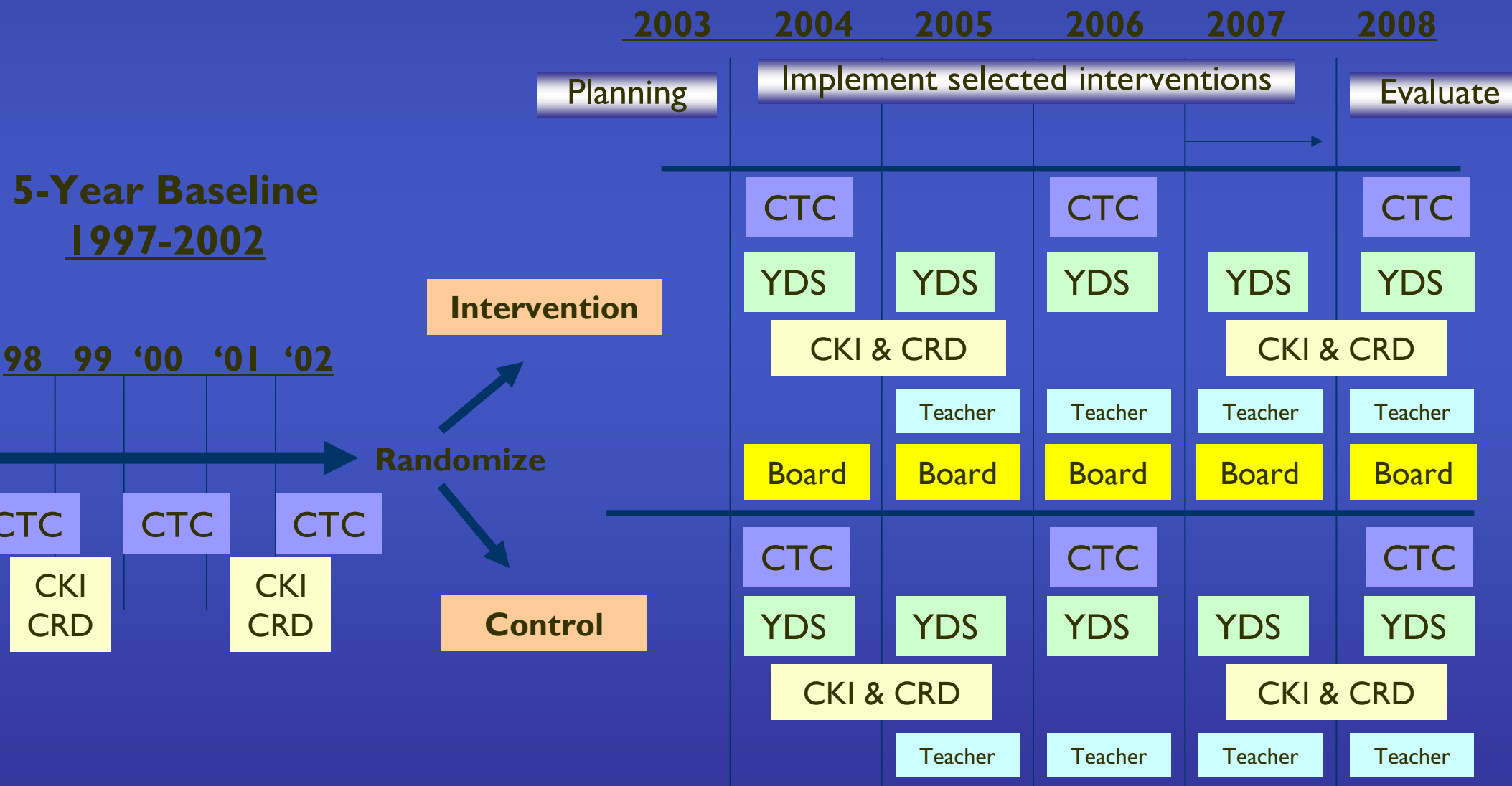
Promoting Alternative Thinking Strategies (PATHS)

Outcomes

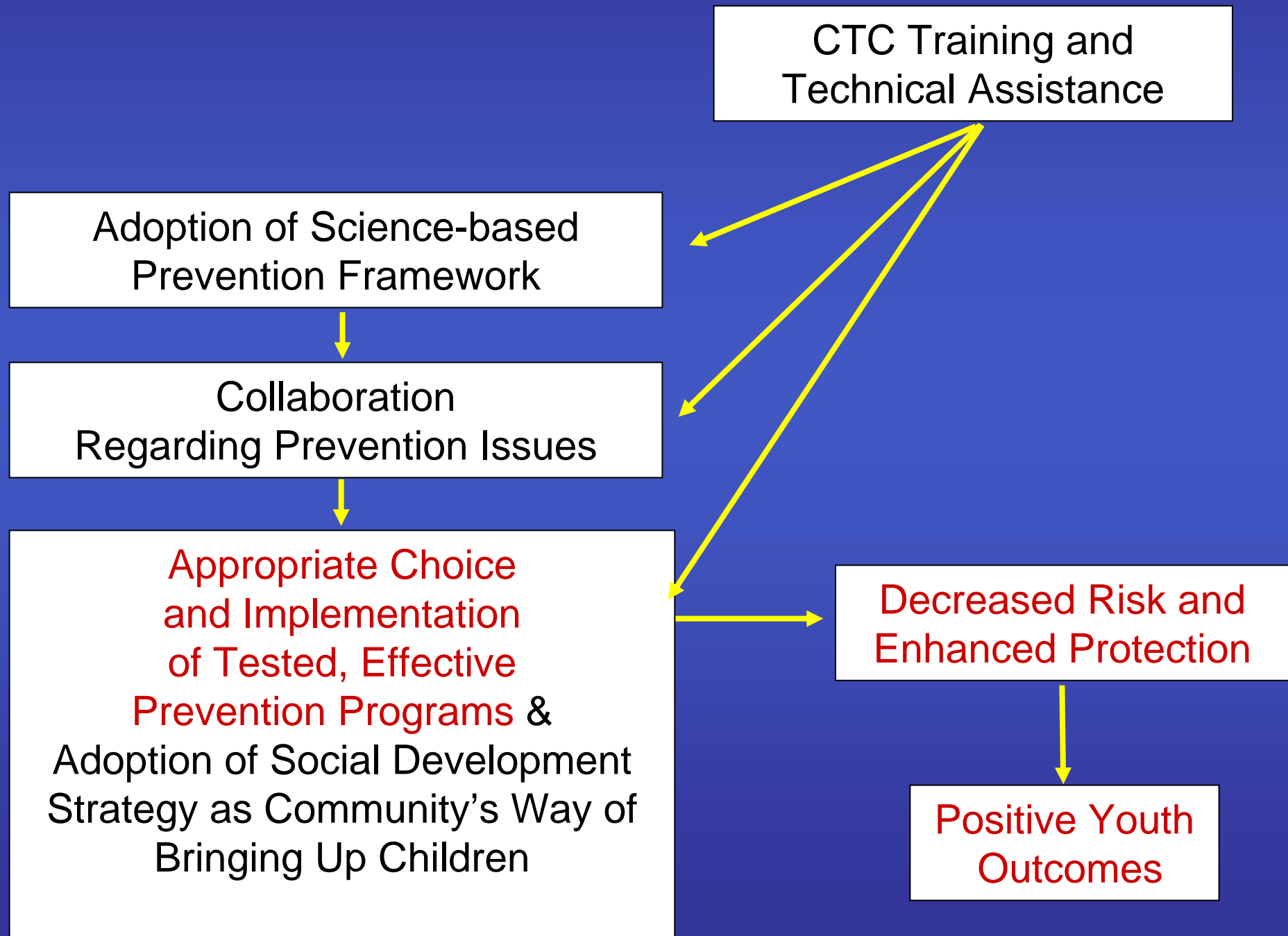
- Increased problem solving and conflict resolution skills
- Increased self-control and frustration tolerance
- Increased cooperation and flexibility
- Reduced aggressive and disruptive behavior and conduct disorder
- Reduced depression

CYDS Study Design

Randomized Controlled Trial 2003-2008



Communities That Care Theory of Change



Tools Assisted Community Coalitions to Prioritize Risk Factors

- Family management problems
- Parental attitudes favorable to problem behavior
- Family conflict
- Low commitment to school
- Favorable attitudes toward problem behavior
- Friends who engage in problem behavior
- Academic failure
- Rebelliousness
- Laws and norms favorable toward drug and alcohol use

Programs Selected in 2004-2007

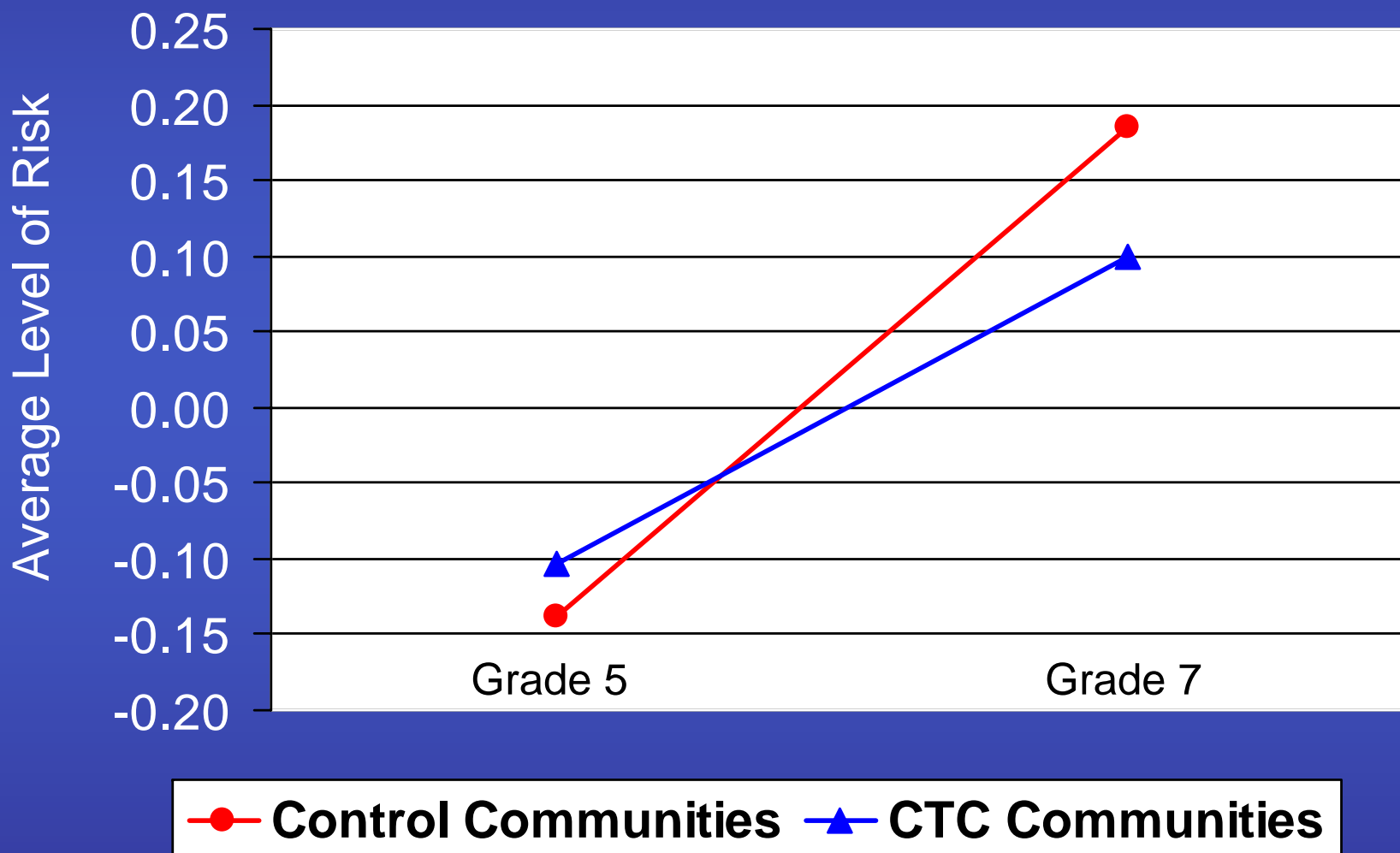


| <u>PROGRAM</u> | <u>2004-05</u> | <u>2005-06</u> | <u>2006-07</u> |
|--|----------------|----------------|----------------|
| All Stars Core | 1 | 1 | 1 |
| Life Skills Training | 2 | 4* | 5* |
| Lion's-Quest Skills for Adolescence | 2 | 3 | 3 |
| Project Alert | - | 1 | 1 |
| Olweus Bullying Prevention Program | - | 2* | 2* |
| Program Development Evaluation Training | 1 | 1 | - |
| Participate and Learn Skills (PALS) | 1 | 1 | 1 |
| Big Brothers/Big Sisters | 2 | 2 | 2 |
| Stay SMART | 3 | 3 | 1 |
| Tutoring | 4 | 6 | 6 |
| Valued Youth Tutoring Program | 1 | 1 | 1 |
| Strengthening Families 10-14 | 2 | 3 | 3 |
| Guiding Good Choices | 6 | 7* | 8* |
| Parents Who Care | 1 | 1 | - |
| Family Matters | 1 | 1 | 2 |
| Parenting Wisely | - | 1 | 1 |

37

| | | | |
|--------------|-----------|-----------|-----------|
| TOTAL | 27 | 38 | 37 |
|--------------|-----------|-----------|-----------|

Pre-post change in risk factors prioritized and targeted in CTC Communities



Note. Values are model-fitted levels of standardized average risk for students in the Youth Developmental Study cohort sample. Nonsignificant difference in means at Grade 5, $t(11) = 0.61, p > .05$. Significant difference in means at Grade 7, $t(11) = -3.13, p = .01$.

Effects of CTC on Onset of Drug Use and Delinquency

- Onset of substance use and delinquency between grade 6 and 8:
 - Alcohol use*
 - Cigarette smoking*
 - Smokeless tobacco use*
 - Marijuana use
 - Other illicit drug use
 - Delinquent behavior*
- Among 5th grade students who had not yet initiated.

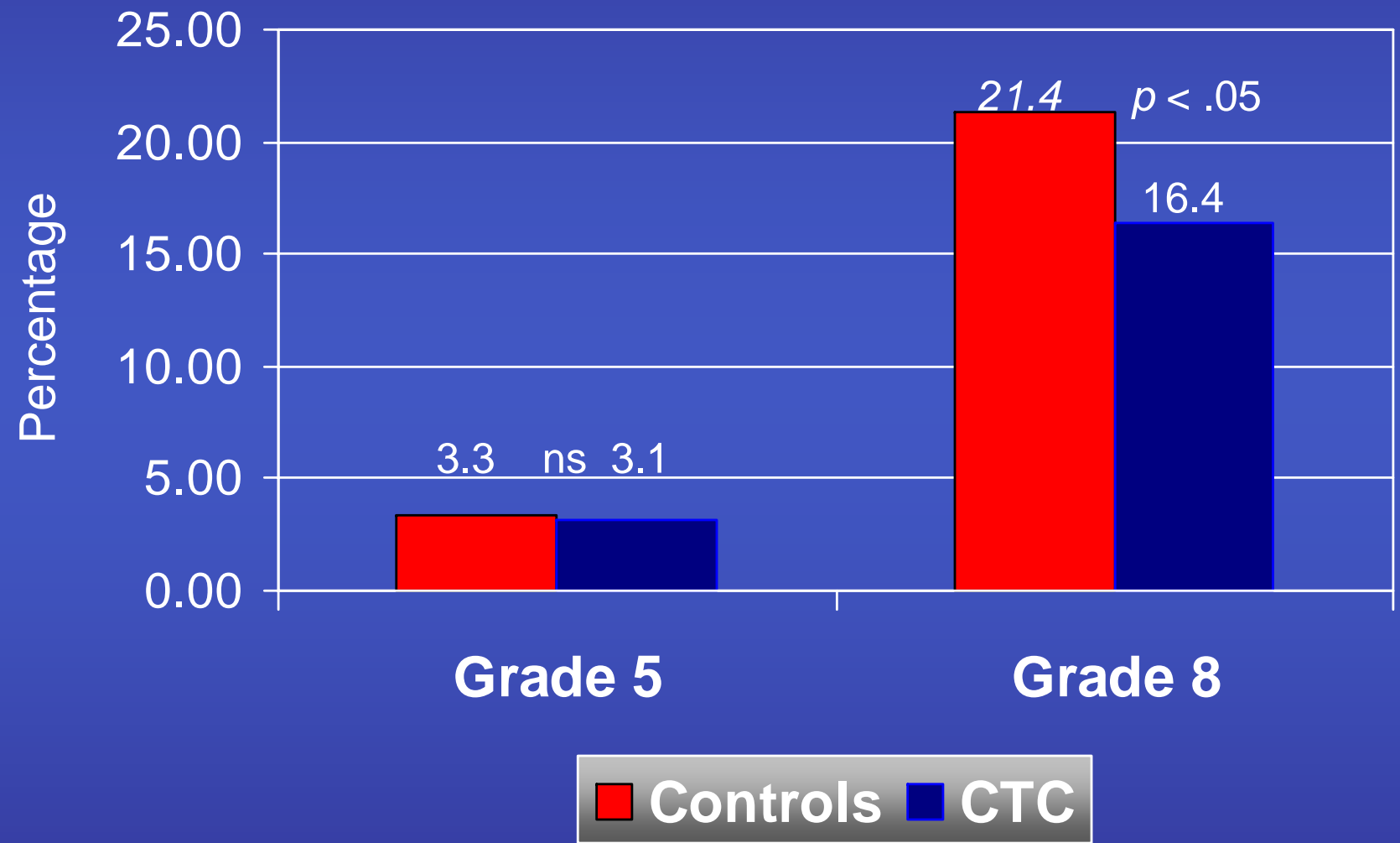
***=Significant at $p < .05$**

Effects of CTC on Current Drug Use and Delinquency in the Panel

- Alcohol use*
- Binge drinking*
- Tobacco Use*
- Delinquency*

*=significant at $p < .05$

Prevalence of 30 Day Alcohol Use In Panel In Control and CTC Communities

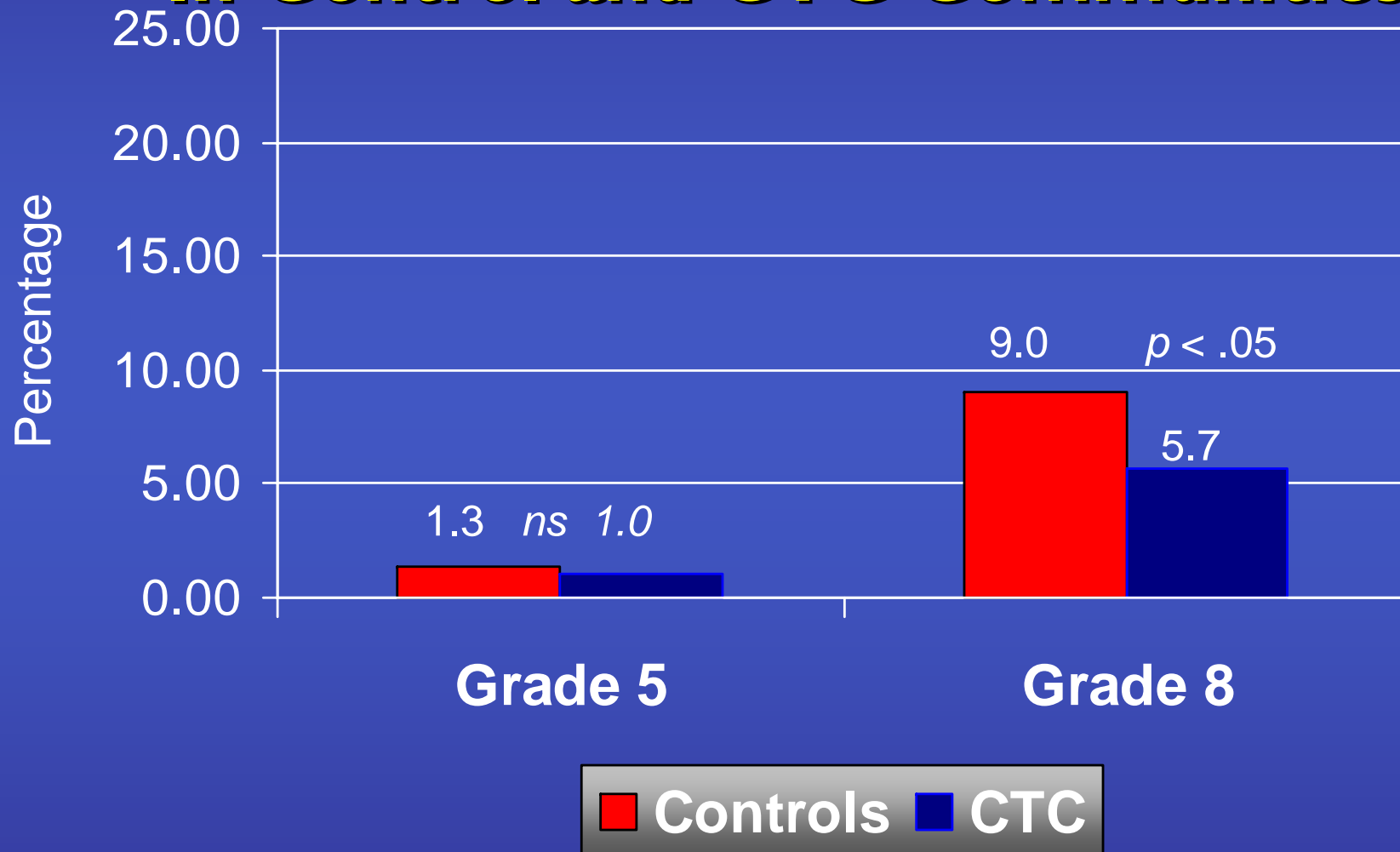


Note. Observed rates averaged across 40 imputations. ns = nonsignificant. N = 4407 41

Prevalence of Binge Drinking in Past Two Weeks

In Panel

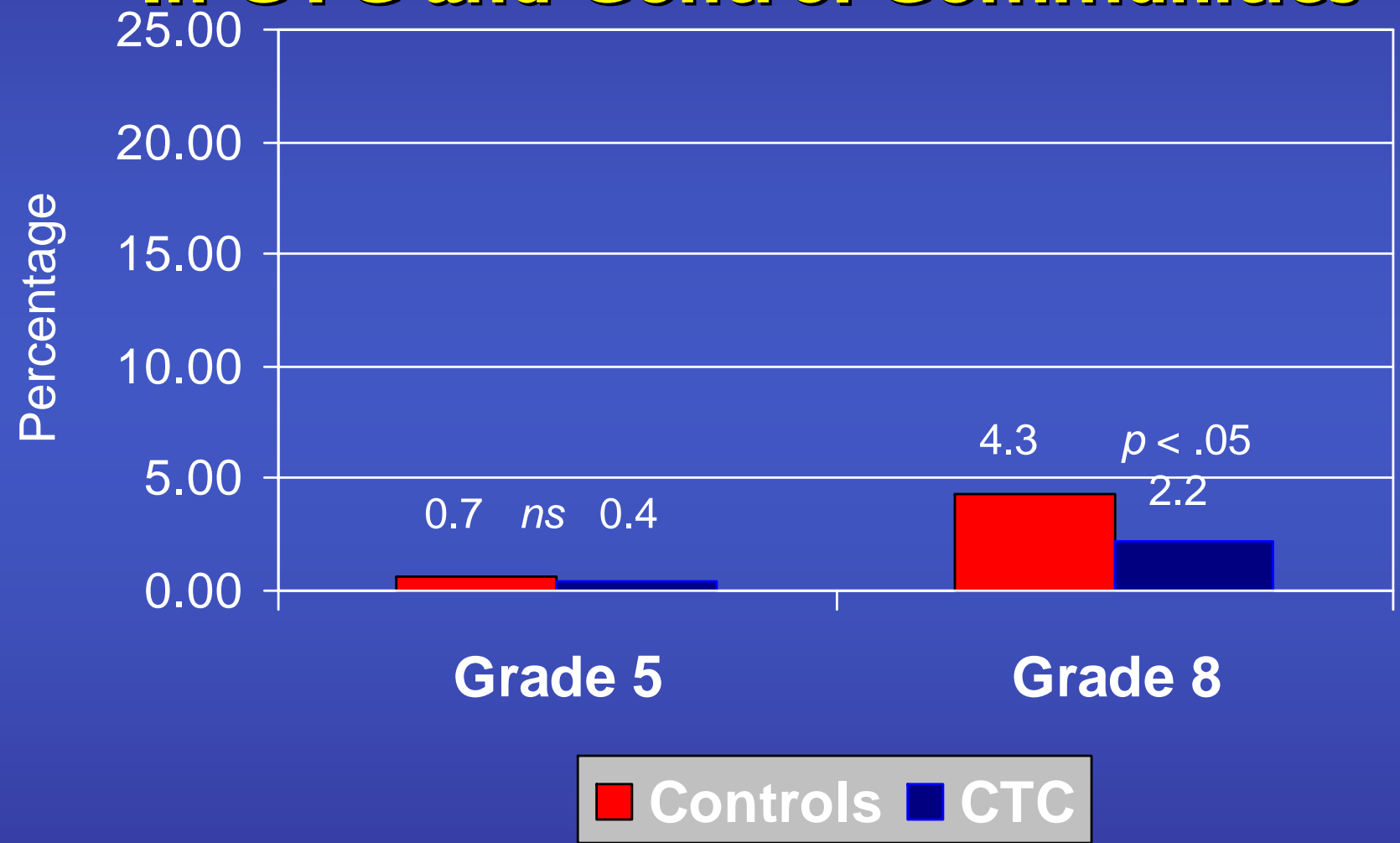
In Control and CTC Communities



Note. Observed rates averaged across 40 imputations. ns = nonsignificant. N = 4407. 42

Prevalence of 30 Day Smokeless Tobacco Use In Panel

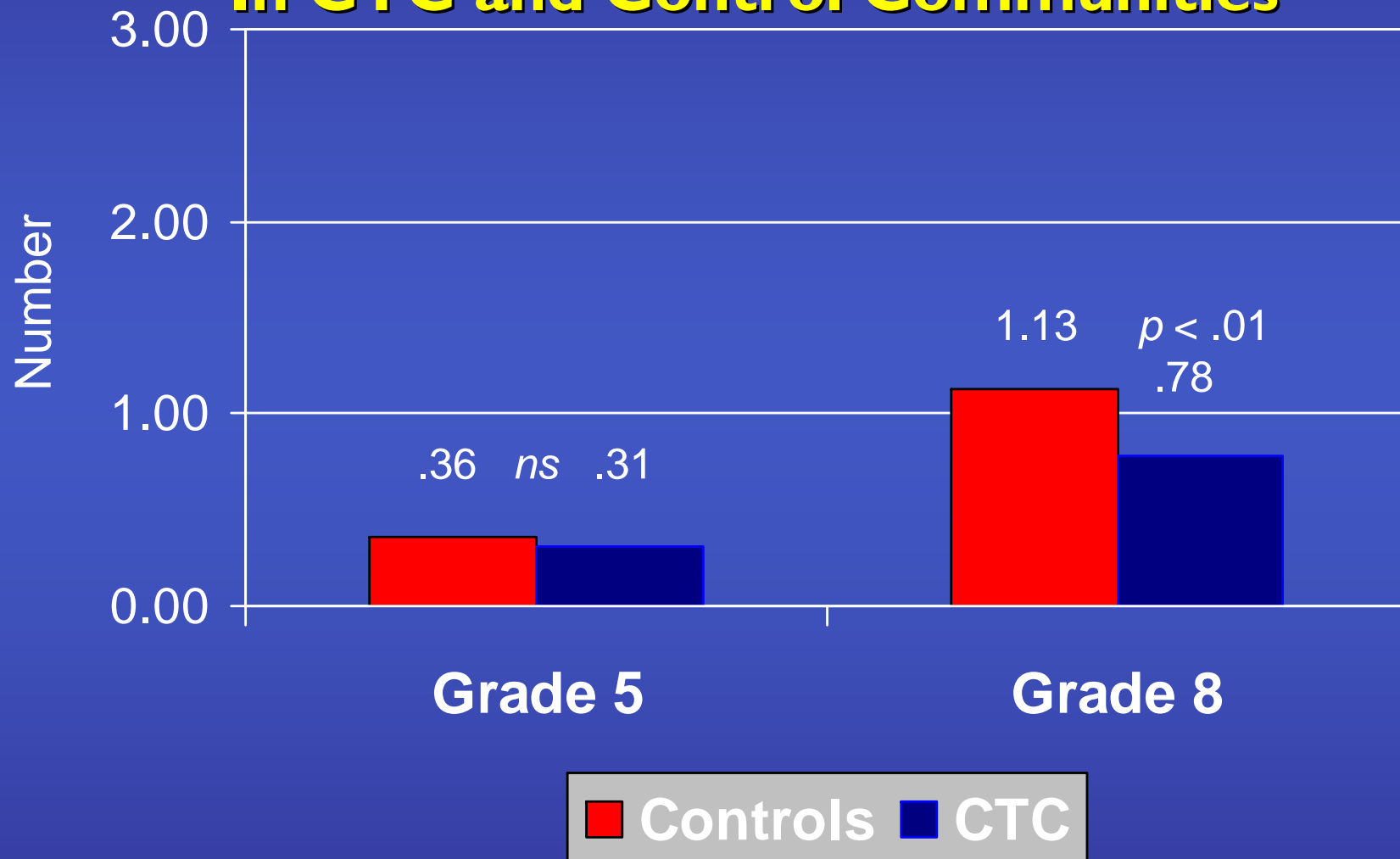
In CTC and Control Communities



Note. Observed rates averaged across 40 imputations. ns = nonsignificant. N = 4407. 43

Mean Number of Different Delinquent Behaviors

Committed by Panel in Past Year In CTC and Control Communities



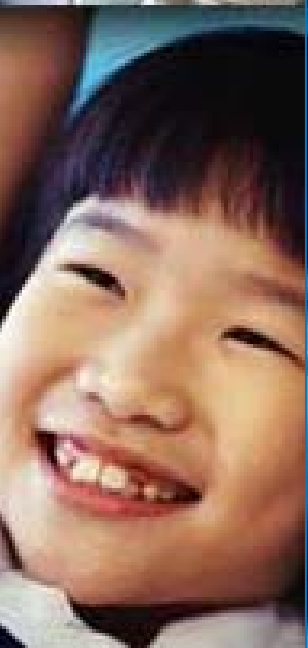
Note. Observed means averaged across 40 imputations.
ns = nonsignificant. N = 4407

SDRG Strengths

- Coherent program of research that includes epidemiology, efficacy, effectiveness and dissemination research
- Shared theory and measurement of behavior, risk and protection across development.
- Organizational structure
 - Survey Research Division and Administrative Unit support project scientific team
- Retention of key staff
- Use of best available analytic, data collection methods
- Have raised over \$100,000,000 and produced over 400 publications

SDRG New Directions

- **Expand research range to link to the genetic, biological predictors of behavior- assistance in linking researchers**
- **Data operations-SDRG data collection service now offered to other social and health scientist (field, CASI, ACASI, T-ACASI, Web, Mail, and Scanning)**



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