

# Prevention Science and Mental Health

## Implementing Community-Based Interventions

J. David Hawkins, Ph.D.  
Social Development Research Group  
School of Social Work  
University of Washington  
[www.sdrdg.org](http://www.sdrdg.org)  
[jdh@u.washington.edu](mailto:jdh@u.washington.edu)

# State of Prevention Science- Mrazek & Haggerty 1994

- n **Chapter 7: Illustrative Preventive Intervention Research Programs.**
- n All focused on individual, family, or peer risk factors. None focused on communities themselves or on community risk factors.

# A Vision for The Role of Community

## Chapter 11: The Knowledge Exchange Process: From Research into Practice:

- the role of the community
  - n Defining the problem and assessing the needs
  - n Ensuring the readiness of the host organization
  - n Selecting a model program
  - n Balancing fidelity and adaptability while implementing the program
  - n Evaluating the program's effectiveness
  - n Providing feedback to the researchers.

(Mrazek & Haggerty, 1994)

- n Community based cardiovascular disease prevention studies were models for community focused prevention, but no trials yet of community focused efforts to prevent adolescent mental health or related problems.

# A Continuing Problem

Despite progress in the development and testing of effective preventive intervention approaches that do not work or have not been evaluated are more widely used than those that have been tested and shown to be effective.

(Gottfredson & Gottfredson, 2002, Hallfors et al 2001, Ringwalt et al., 2002.)

Methods for widespread dissemination of tested and effective prevention policies and programs while ensuring high levels of fidelity are needed.

# G What Has NOT Worked in Community Based Preventive Trials ?

**Providing resources to support community coalitions without a structure or process to ensure**

n clearly defined goals based in data, with high-quality data sources to monitor progress;

n use of tested and effective programs, with attention to monitoring of implementation quality and fidelity;

n evaluation of impacts on outcomes meaningful to the community

Hallfors et al. (2002); Klerman et al. (2005); Merzel & D'Afflitti, (2003).

# What Has Worked in Randomize Community-Based Prevention Trials?

Preventive interventions focused on malleable community level risk / protective factors.

# Risk Factors for Adolescent Problem Behavior

<b>Risk Factors</b>	<b>Substance Abuse</b>	<b>Delinquency</b>	<b>Teen Pregnancy</b>	<b>School Drop-Out</b>	<b>Violence</b>	<b>Depression &amp; Anxiety</b>
<b>Community</b>						
<b>Availability of Drugs</b>	✓				✓	
<b>Availability of Firearms</b>		✓			✓	
<b>Community Laws and Norms Favorable Toward Drug Use, Firearms, and Crime</b>	✓	✓			✓	
<b>Media Portrayals of Violence</b>					✓	
<b>Transitions and Mobility</b>	✓	✓		✓		✓
<b>Low Neighborhood Attachment and Community Disorganization</b>	✓	✓			✓	
<b>Extreme Economic Deprivation</b>	✓	✓	✓	✓	✓	

# Example

- n Communities Mobilizing for Change on Alcohol (15 community randomized trial.)
  - n Community organizing intervention to change policies and practices of community institutions to reduce the availability of alcohol to youth.
  - n Reduced propensity of 18- to 20-year olds to try to buy alcohol, provide alcohol to other teens, or consume alcohol.
  - n Significantly lower arrests for driving under the influence among 18- to 20-year olds in intervention communities compared with controls.  
(Wagenaar et al. 2000)

# Examples

- n Community Trials Intervention to Reduce High Risk Drinking- Holder et al. 2000.
- n Project Northland- Perry et al. 2002.
- n Midwestern Prevention Project - Pentz et al. 2006

# What Has Worked in Randomize Community-Based Prevention Trials?

Strategies that build local partnerships or coalitions to promote use of tested and effective programs to address community prevention needs.

# Why Community? Why Local?

n Prevention policies and programs are implemented at the local level.

n Without implementation by local practitioners, whether mental health workers, public health nurses, parents, teachers, liquor store clerks, or police, tested and effective policies and programs are likely to fail to achieve effects.

# What Works? Example

**PROSPER - *PRO*moting School–community university Partnerships to Enhance Resilience (Spoth et al. 2007) .**

- n Community teams composed of a Cooperative Extension staff team leader, a public school representative co-leader, representatives of local human service agencies, and other local community stakeholders.**

# PROSPER Process

- n Community teams select a tested and effective parenting program from menu of 3, and
- n Teams select a tested and effective school curriculum from menu of 3.
- n Teams oversee implementation of chosen programs in community and schools.

# Substance-Related Outcomes for 7th Graders 1½ Years Past Baseline

(Intent-to-treat analysis)

Intervention	Control	F-value
LS Mean	LS Mean	(1,12)

## Most Recent Year User Rates:

Drunkenness	0.0687	0.0902	4.67+
Marijuana Use	0.0280	0.0481	<b>19.90**</b>
Inhalant Use	0.0362	0.0582	<b>13.31**</b>

## 7th Grade Multi-Level ANCOVA Results

+p<0.10; \*\*p<0.01

# Example

## The *Communities That Care* System

- n Activates community coalitions.
- n Measures community levels of protection and risk by surveying young people.
- n Matches the community's profile of risk and protection with tested, effective actions.
- n Focuses on outcomes to insure success: Are fewer teens using drugs? Fewer smoking? Fewer committing delinquent acts?

# CTC Trainings

1. Key Leader Orientation
2. Community Board Training
3. Community Assessment Training
4. Community Resource Assessment Training
5. Community Planning Training
6. Community Program Implementation Training



# The Community Youth Development Study (CYDS)

- A 24 community randomized controlled trial to test the Communities That Care system started in 2003.

# Prioritized Risk Factors in 12 CTC Intervention Communities

- 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

# Program Choice

**CTC Community Board members selected prevention programs from a menu of programs\* that:**

- ~ Showed significant effects on prioritized risk factors and on drug use, delinquency, or violence in at least one high-quality research study.**
- ~ Targeted children or families in grades 5-9.**
- ~ Provided materials and training.**



# Programs Selected in 2004-2007



<u>PROGRAM</u>	<u>2004-05</u>	<u>2005-06</u>	<u>2006-07</u>
<b>All Stars Core</b>	1	1	1
<b>Life Skills Training</b>	2	4*	5*
<b>Lion's-Quest Skills for Adolescence</b>	2	3	3
<b>Project Alert</b>	-	1	1
<b>Olweus Bullying Prevention Program</b>	-	2*	2*
<b>Program Development Evaluation Training</b>	1	1	-
<b>Participate and Learn Skills (PALS)</b>	1	1	1
<b>Big Brothers/Big Sisters</b>	2	2	2
<b>Stay SMART</b>	3	3	1
<b>Tutoring</b>	4	6	6
<b>Valued Youth Tutoring Program</b>	1	1	1
<b>Strengthening Families 10-14</b>	2	3	3
<b>Guiding Good Choices</b>	6	7*	8*
<b>Parents Who Care</b>	1	1	-
<b>Family Matters</b>	1	1	2
<b>Parenting Wisely</b>	-	1	1
<b>TOTAL</b>	<b>27</b>	<b>38</b>	<b>37</b>



# Exposure in the Community

Program Type	2004-05	2005-06	2006-07
School Curricula	1432	3886	5165
After-school*	546	612	589
Parent Training	517	665	476

\*Includes PALS, BBBS, Stay SMART, and Tutoring programs



# Effective Dissemination Requires Implementation Fidelity and Methods to Measure It.



- Adherence
- Dosage / exposure
- Quality
- Participant responsiveness

# Fidelity Assessment Checklists

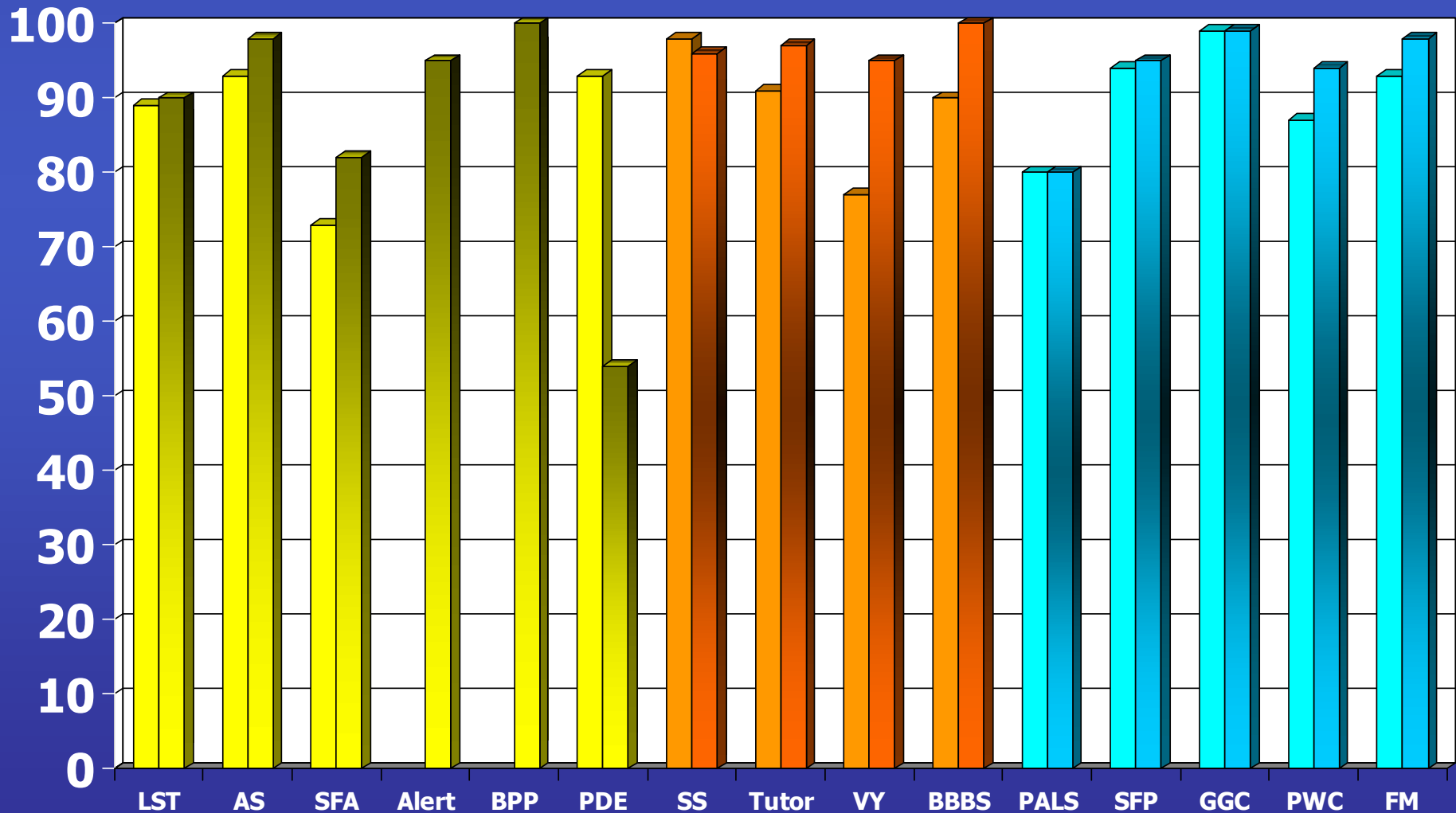
- Used to assess adherence and dosage of all 16 programs implemented.

- Over 6,000 checklists completed by program implementers in 12 intervention communities.



# 2004-05 and 2005-06 school years

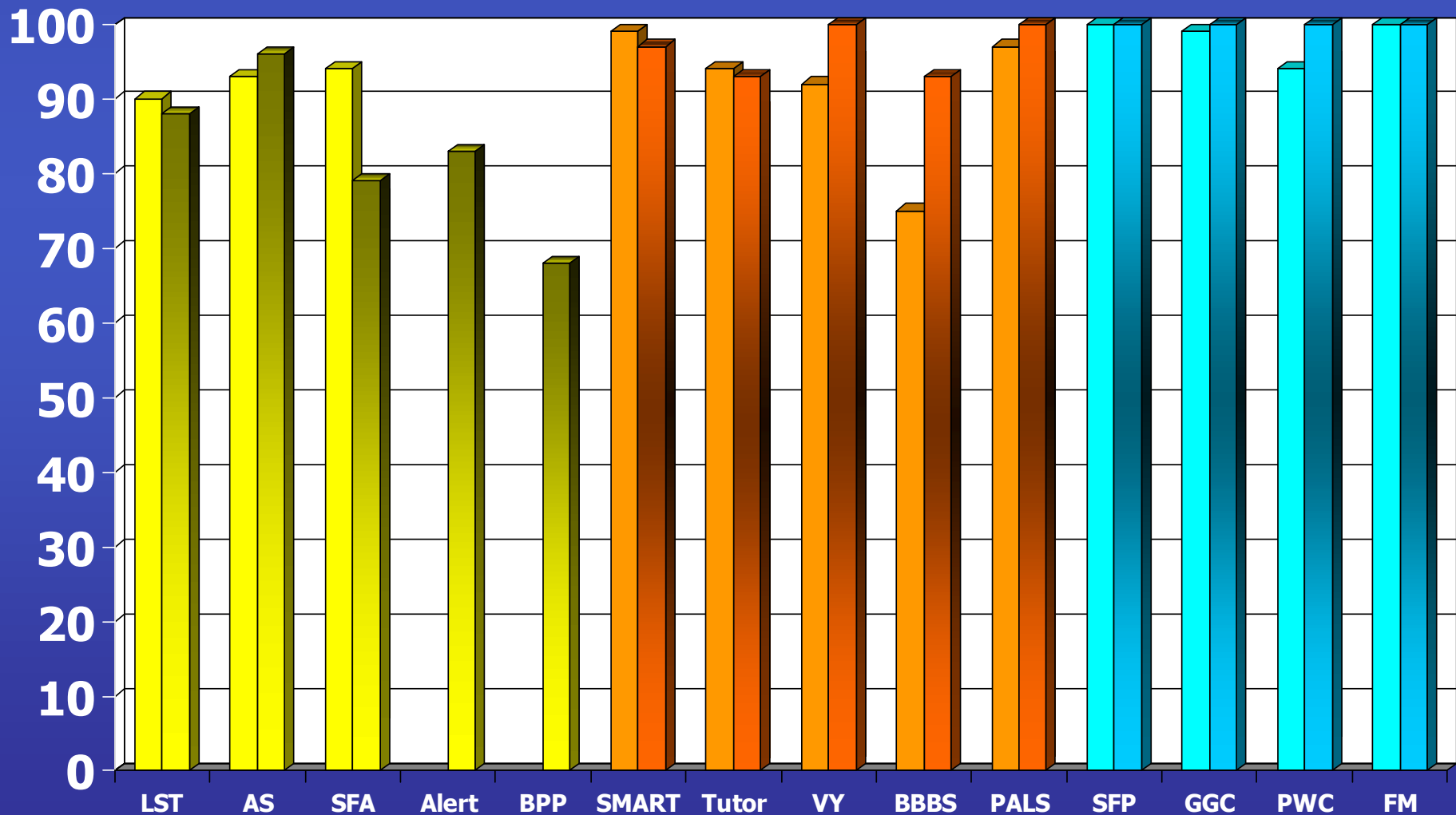
Percentage of material taught or core components achieved



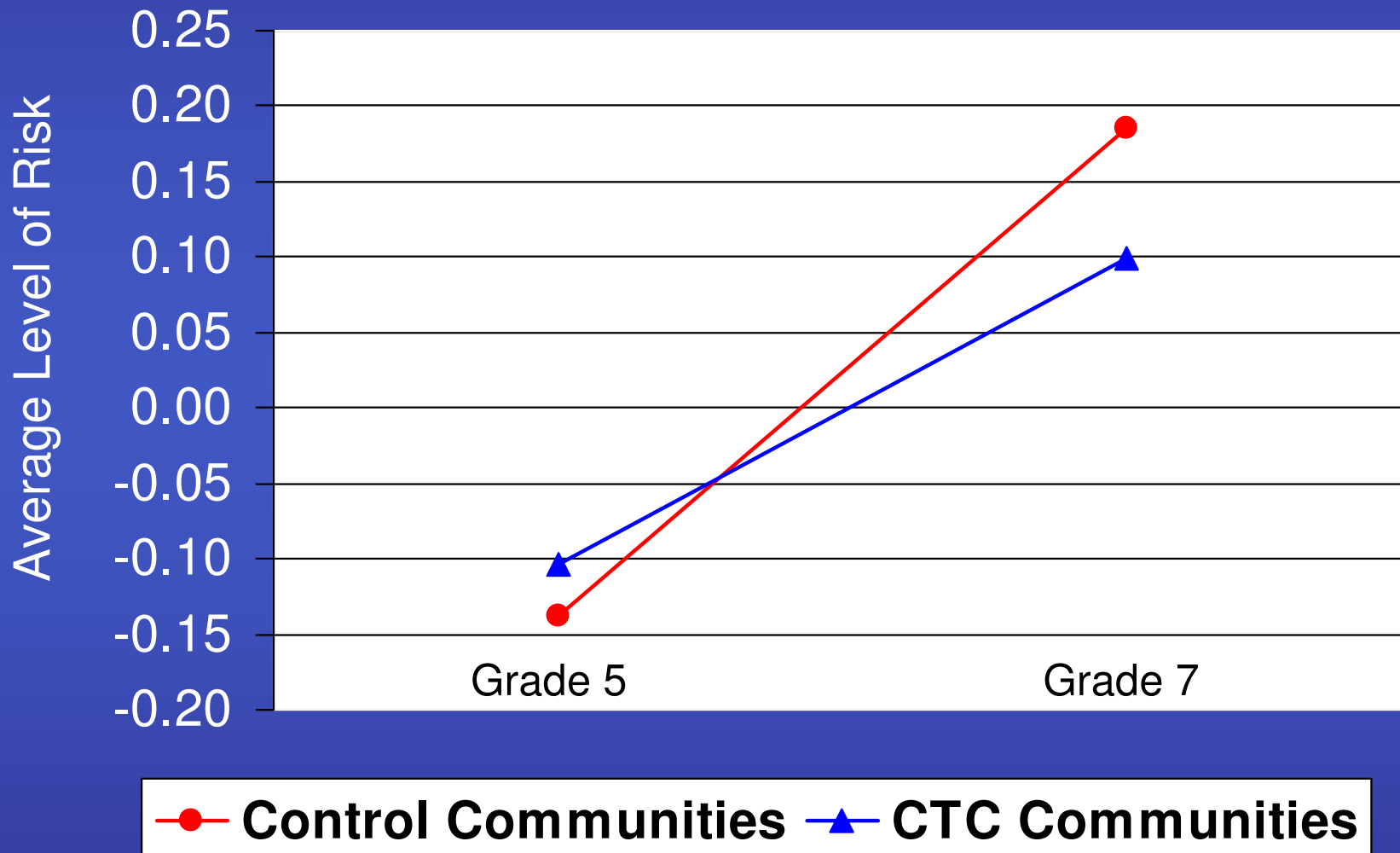
# 2004-05 and 2005-06 school years

*(number, length, and frequency of required  
sessions)*

Percentage of delivery requirements met

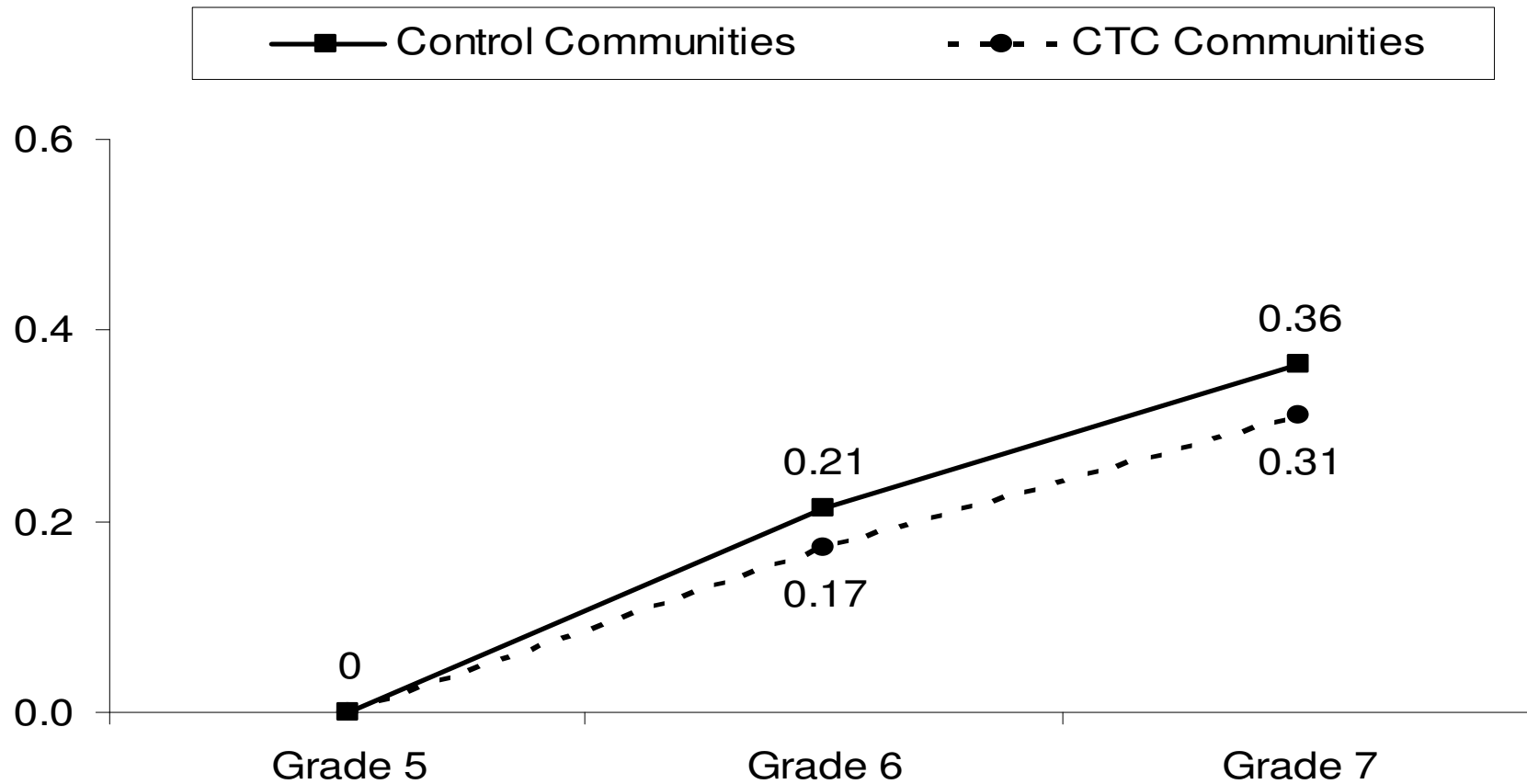


# Pre-post change in risk factors prioritized and targeted in CTC Communities



Note. Values are model-fitted levels of standardized average risk for students in the Youth Developmental Study panel sample. Nonsignificant difference in means at Grade 5,

# CTC Effects on Initiation of Delinquent Behavior among Non-delinquents at Grade 5



# Example

## Project STEP (Steps Toward Effective Prevention) -Pentz (Riggs et al. 2007)

- n Activated community coalitions.
- n Promoted community adoption and implementation of effective prevention programs.
- n Designed to increase coordination among community organizations responsible for prevention.
- n **Used six satellite downlink training broadcasts to provide training to remote sites.**
- n Randomized trial of broadcast training with and without t.a. vs controls

# Shared Characteristics of Effective Community Based Preventive Interventions

- n Use partnerships or coalitions of stakeholders to introduce innovation.
- n Use local data on risk, protection and youth mental health and behavior problems to establish priorities and monitor progress.
- n Promote use of tested and effective programs and/or policies.

# Implementation Challenges in Community Based Prevention

## Distinguishing tested and effective preventive interventions from the rest.

- “Best practices” versus tested and effective preventive interventions.
- Requires standards for efficacy and effectiveness trials. SPR’s standards of evidence represent consensus of prevention researchers. ([www.preventionresearch.org](http://www.preventionresearch.org))
- SAMHSA’s National Registry of Effective Prevention Programs (NREPP) has potential, but failure to set evidence of effectiveness in rigorous efficacy or effectiveness trial(s) as a criterion for inclusion decreases utility of registry. (Hallfors et al. 2007).

**We need agreement on standards for trials and consistent utilization of those standards by those making lists.**

# Implementation Challenges in Community Based Prevention

- Creating a norm of “implementation fidelity” in communities.
- Finding an institutional home in communities for science based prevention.
- Continual need for orientation and training of new stakeholders in science based prevention.
- Creating shared outcome goals across community stakeholders.

# Implementation Challenges in Community Based Prevention

- Building and maintaining adequate systems for local monitoring of preventive interventions and their effects.
- Assessing and building community capacity for creating and sustaining partnerships / coalitions to promote use of tested and effective programs.
- Implementing community based interventions in culturally diverse communities.
- The stage of development of prevention science itself presents problems for going to scale across multiple communities

# Dissemination of Effective Preventive Interventions Requires Capacity

- n Published intervention including manuals, implementation guides, curricula.
- n Certification of trainers or electronic training.
- n High quality, readily available technical assistance
- n Dissemination organization committed to distribution and delivery of tested program.
- n Data monitoring system to provide feedback on implementation fidelity and outcomes. AND
- n **Community demand for preventive interventions that work**

# Stimulating Demand for Effective Community Based Preventive Interventions

Demand for programs that work can be stimulated by leadership from federal and state governments.

- Require the use of tested, effective programs.
- Require and support evaluation of untested programs.
- Create opportunities for research on dissemination/diffusion of tested and effective preventive interventions through braiding of service delivery funding and research funding.
- Require that funded service programs are prepared to participate in rigorous randomized trials.

# The Senate Appropriations Committee report accompanying its FY 2007 Labor-HHS Education Appropriations bill (S. 3708, as approved by the Committee on July 20, 2006)

*The Committee strongly supports the Department's efforts to carry out congressionally authorized evaluations of Federal education programs using rigorous methodologies, particularly random assignment, that are capable of producing scientifically valid knowledge regarding which program activities are effective. To ensure that authorized evaluations are conducted in a rigorous manner that is independent of the program office and includes scientific peer review, the Committee believes that the Institute of Education Sciences should be the lead agency for the design and implementation of these evaluations. **The Committee believes further that it is essential for program offices to work collaboratively with the Institute to include a priority or requirement in program solicitations for grantee participation in such evaluations, including random assignment, to the extent the Institute deems appropriate and where not specifically prohibited by law.** (Sen. Rept. 109-287, July 20, 2006, p. 287)*

# Research Needed on Diffusion of Effective Community-based Interventions

n The role of “linking change agents.”

n Understanding and using “diffusion networks.”

n Using and/or creating state, regional and national infrastructures to support community coalitions seeking to use prevention science to guide preventive action.

# A Future for Community-Based Prevention Guided by Preventive Science

- n **Data Driven:** Ongoing monitoring of well-being, problem behaviors, and risk and protective factors provides data for community decisions on priorities.
- n **Evidence Based:** Widespread adoption of effective programs chosen, managed and implemented with fidelity and sustained by communities.
- n **Outcome Focused:** Success is not measured by number of adoptions but by reductions in community levels of adolescent mental health and behavior problems.

# Prevention Science and Mental Health

## Implementing Community-Based Interventions

J. David Hawkins, Ph.D.  
Social Development Research Group  
School of Social Work  
University of Washington  
[www.sdrdg.org](http://www.sdrdg.org)  
[jdh@u.washington.edu](mailto:jdh@u.washington.edu)