The State of Preventive Interventions & What We Know Works in Prevention

Kevin Haggerty, Ph. D.
Richard F. Catalano
Social Development Research Group,
University of Washington,
School of Social Work

Thanks to Julia Greeson, Division of Behavioral Health and Recovery

Crisis---Danger and Opportunity

In the past, people believed that no social intervention programs for youth worked reliably. *Today, we know better.*

STATE OF THE ART, CIRCA 1980

Widespread belief that *nothing worked* in public systems

- Analysis of existing delinquency and substance abuse prevention programs found no evidence of effectiveness.
- Belief that no prevention programs had positive effects

(Romig, 1978; Martinson, 1974; Lipton, et al, 1975; Janvier et al., 1980; Berleman,, 1979)

STATE OF THE ART, CIRCA 2011

- Prenatal & infancy programs
- Early childhood
- Parent training
- School behavior management strategies
- Children's mental health
- Juvenile delinquency and substance abuse prevention
- Community mobilization
- Education
- Public health

Can consistently produce better outcomes

Hawkins and Catalano, 2004

What made the difference?

- Clear understanding of risk and protective factors
- Strong evaluation methodology & behavior change models
- More programs tested in controlled trials shown to be effective when implemented with fidelity
- More evidence based programs that are cost effective
- More government support for evidence-based programs

Why evidence-based programs?

- Stronger & more consistent positive outcomes
- Strong ethical argument – avoid potential harmful effects
- Potential cost savings to taxpayers and society
- Improving the well-being of our children at a population level

Key Elements of Effective Programs

- Based on theory and data about mechanisms of change
- Developmentally appropriate materials
- Sensitive to the culture and community
- Delivered as intended
- Participants receive sufficient dose
- Interactive teaching techniques are used
- Implementers are well trained
- Continually evaluated

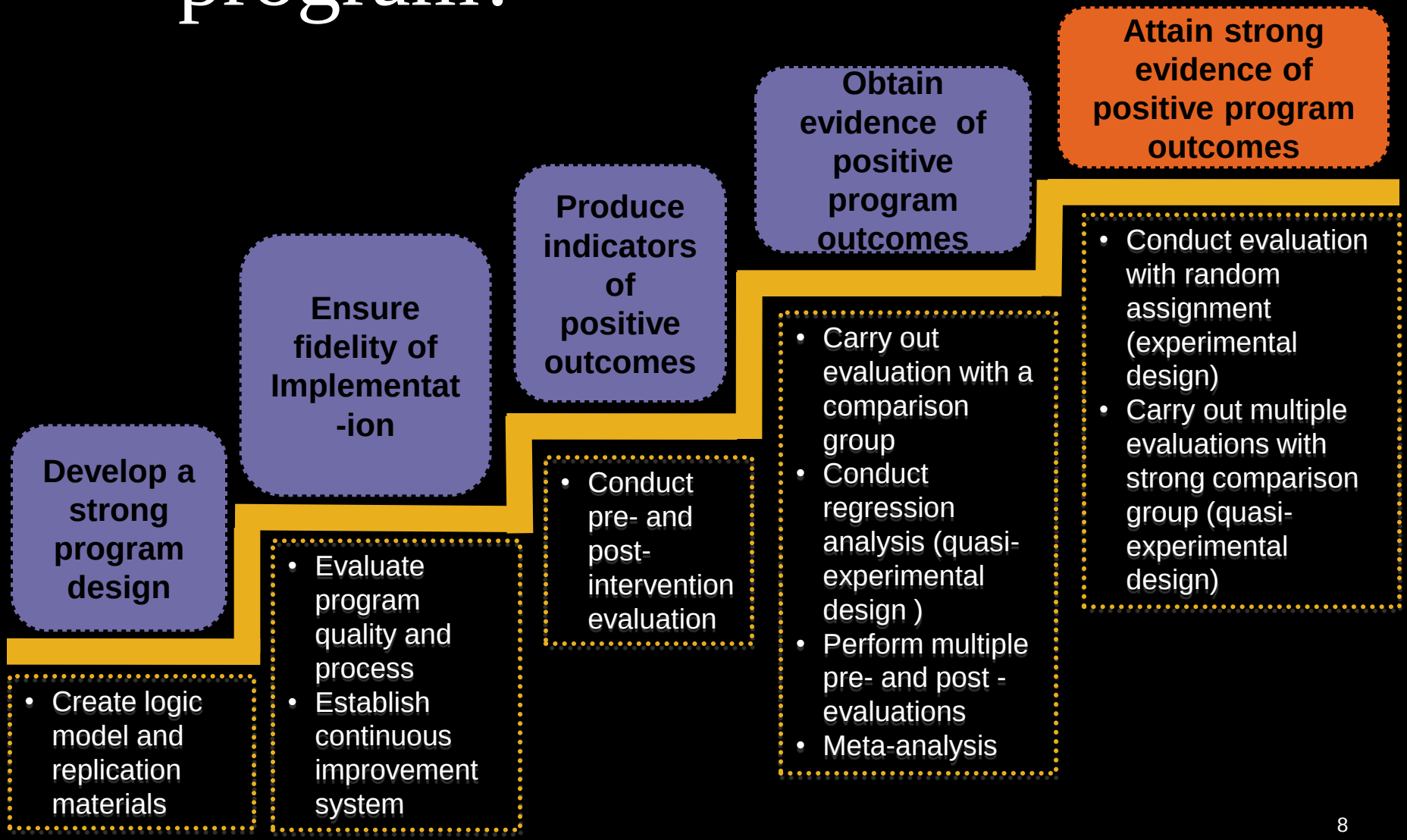
NIDA, 2010

Why Evidence Based? What DOES NOT Work?

- Didactic programs targeted on arousing fear (e.g. *Scared Straight*).
- *D.A.R.E., Hutchinson Smoking Prevention Project, Keep a Clear Mind*
- Preventive Alcohol Education Programs
- One-time efforts that are not sustained or produce normative change
- Regulations or legislation without accompanying enforcement
- Poorly implemented Evidence Based Programs

Sherman, 2002/ Prevention Action, 2011/Childtrends, 2008

What is an Evidence Based program?



How do you assess the evidence?

On the one hand….

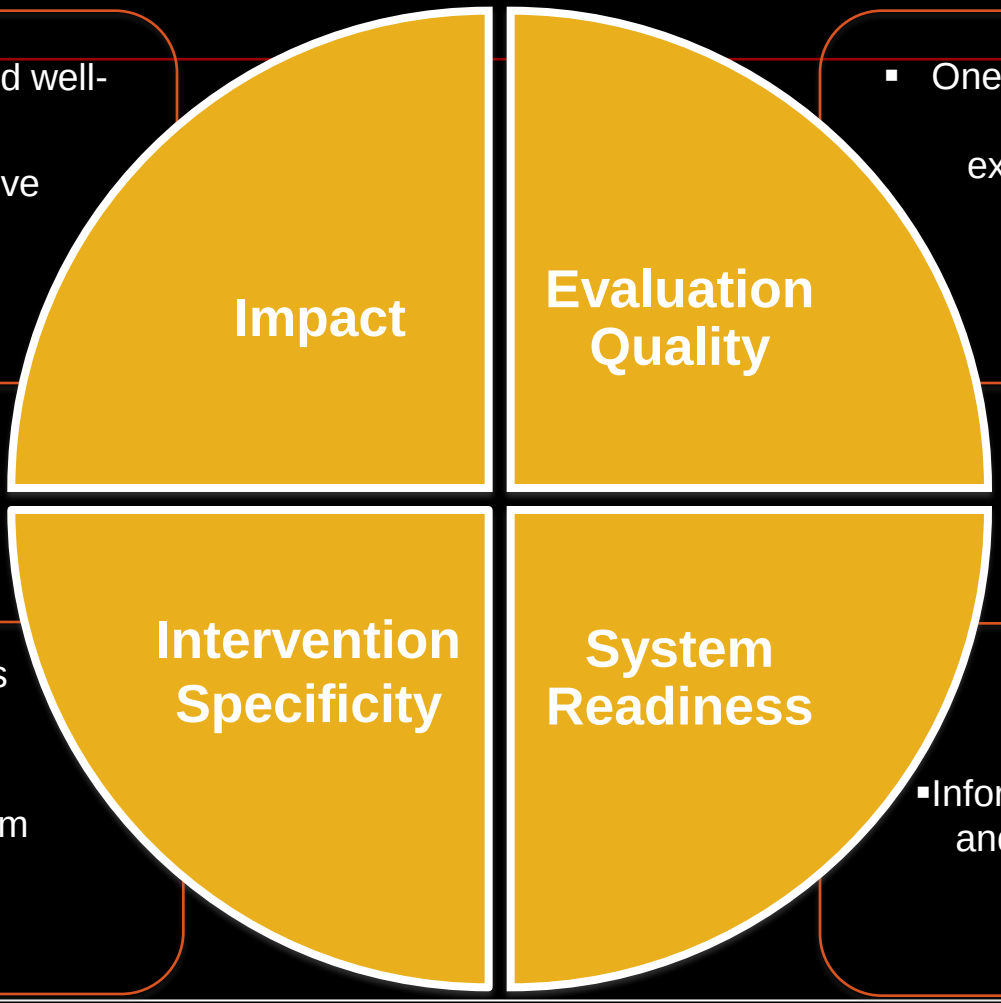
On the other hand…

Ask two questions:

1. Does it work?
2. How do you know it works?

What are the essential characteristics of a proven program? (Blueprints criteria)

- Positive impact on child well-being outcomes
- Absence of any negative effects



- One randomized controlled trial OR a quasi-experimental trial without design flaws

- Population of focus is clearly defined
- Risk and protective factors that a program seeks to change are identifiable

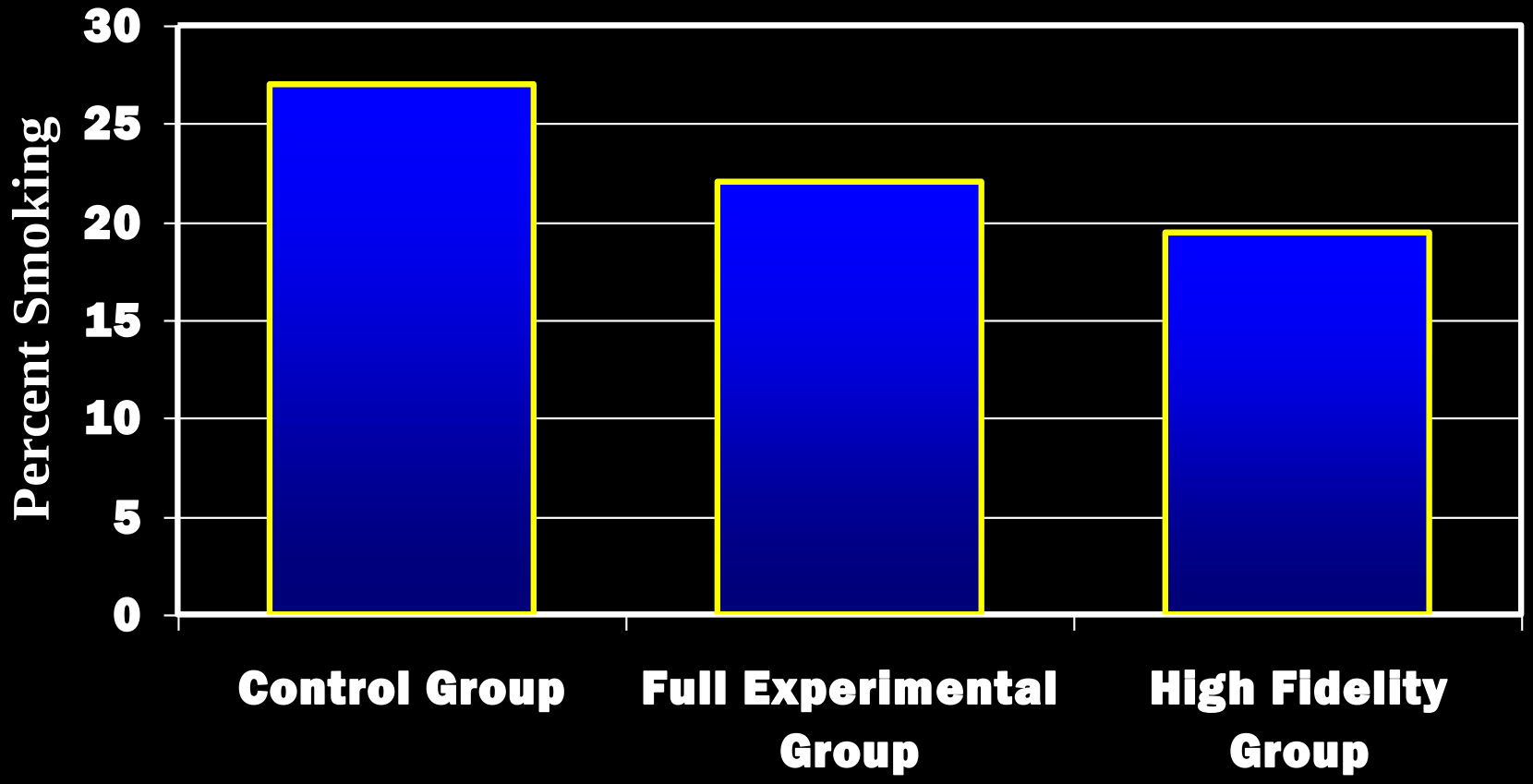
- Training materials are available
- Information on the financial and human resources are required
- Cost-benefit analysis

Why is fidelity important?

Fidelity = faithfully and fully replicating the program model you have selected

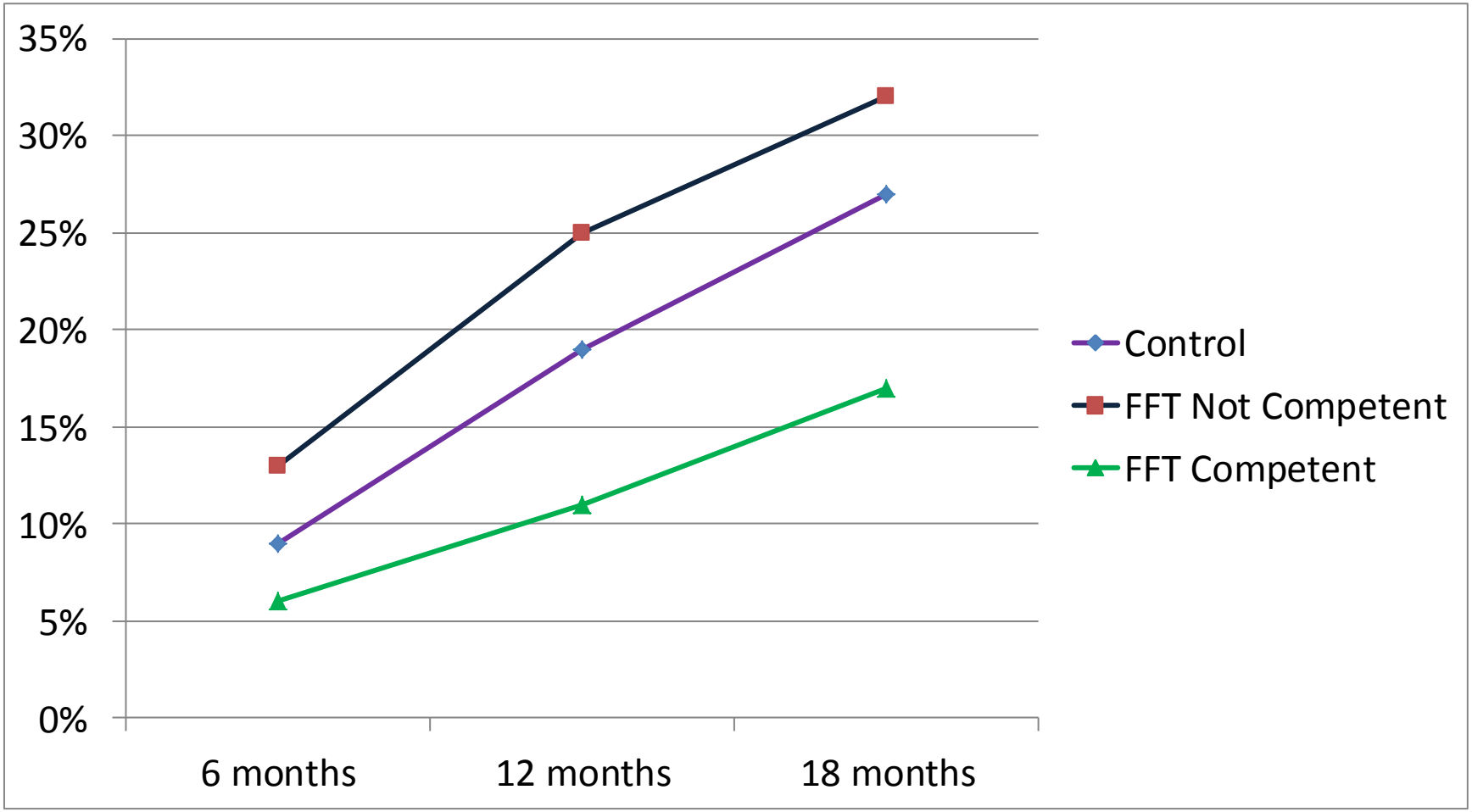
Without high fidelity, your desired outcomes may not be achieved

Effects of program fidelity on past month smoking reported by middle school students—Life Skills Training



Source: Botvin, Baker, Dusenbury, Botvin, & Diaz. (1995). JAMA, 273, 1106-1112.

Functional Family Therapy:
Felony recidivism rates over time, by therapist competency



Washington State Institute for Public Policy, 2004

What boosts implementation fidelity?

- Published material including manuals, guides, curricula
- Certification of trainers
- High quality, readily available technical assistance
- Backbone organization committed to distribution and delivery of tested program
- Data monitoring system to provide feedback on implementation fidelity and outcomes

Achieving take-up of EBPs has been a major challenge

- **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; Ringwalt et al., 2002; 2010)

The DBHR Programs

Selection Criteria

1. Demonstrated marijuana use outcome (age 12-20)
2. Used comparison groups in study design
3. Accounted for threats to external validity (i.e. sampling bias, baseline equivalence, sample selection)
4. Documented internal validity (i.e. implementation measures)
5. Demonstrated sustained effects
6. Demonstrated program cost-benefit (when available)

Program review was conducted by the Western Resource Team (SAMHSA CAPT) and reviewed by SDRG

The "Lists" (DBHR endorsed)

- Athena Forum
- Blueprints for Healthy Development
- Coalition for Evidence-based Policy
- Crime Solutions
- Find Youth Info *(Levels 1, 2, and 3 with 1 being best)*
- Norberg MM, Kezelman S, Lim-Howe N (2013) Primary Prevention of Cannabis Use: A Systematic Review of Randomized Controlled Trials.
- OJJDP Model Programs
- RAND Corp. Promising Practices Network on Children, Families and Communities

The DBHR approved progarms

Family

- Guiding Good Choices
- Positive Family Support—Family Check-up

School

- Caring School Community
- Keepin' it Real
- Life Skills Training
- Lions Quest
- Toward No Drug Abuse
- Redcliff Wellness Project

Individual

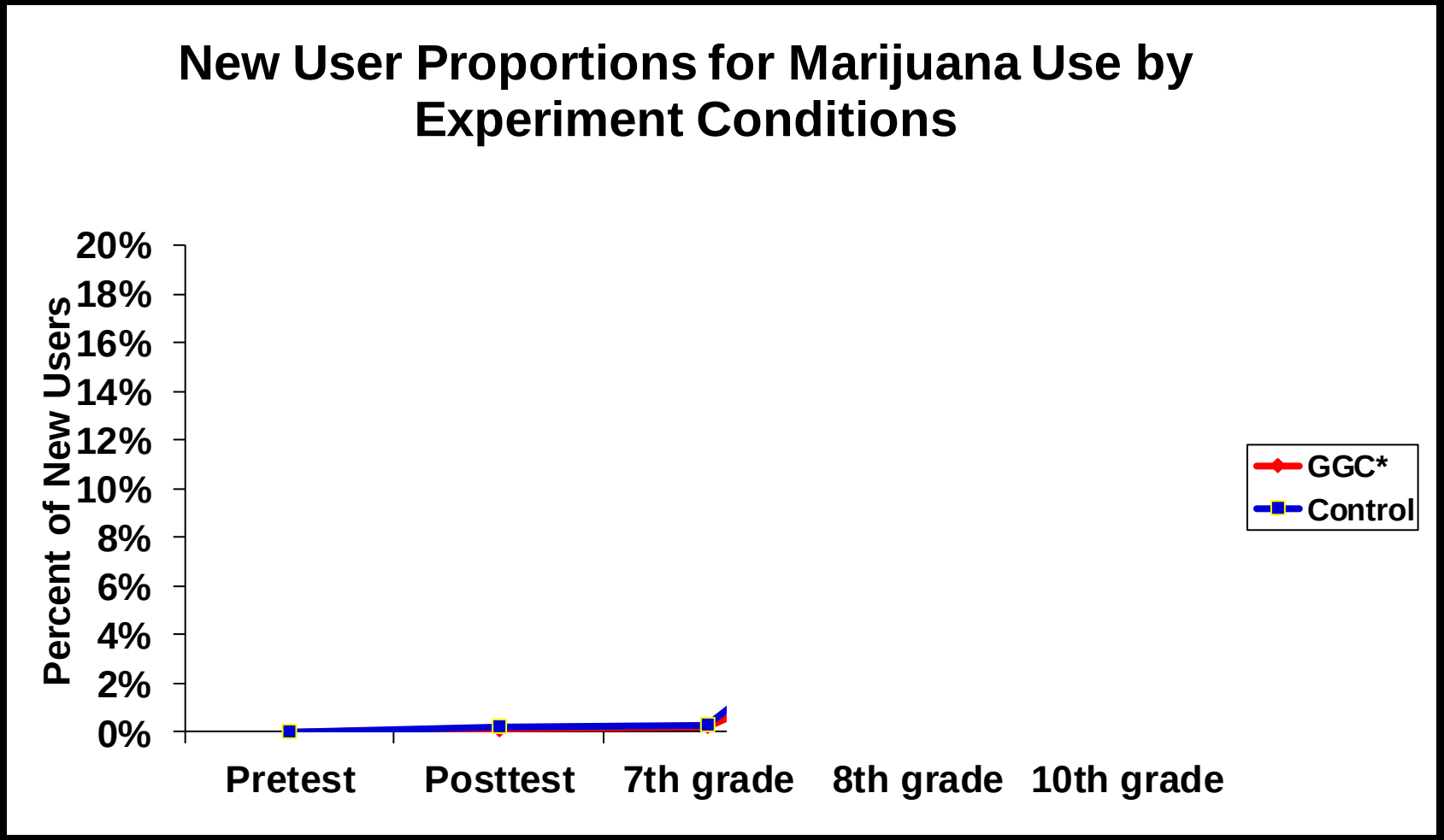
- In Shape
- SPORT
- Multi-Dimensional Treatment Foster Care

Community

- Project Northland
- Project Venture

See www.theathenafourm.org for full descriptions

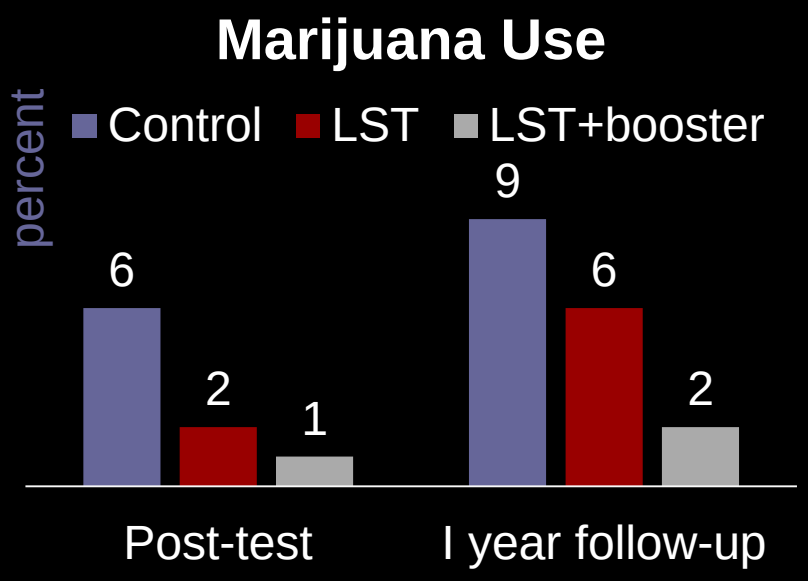
Guiding Good Choices – Preventing Marijuana Use

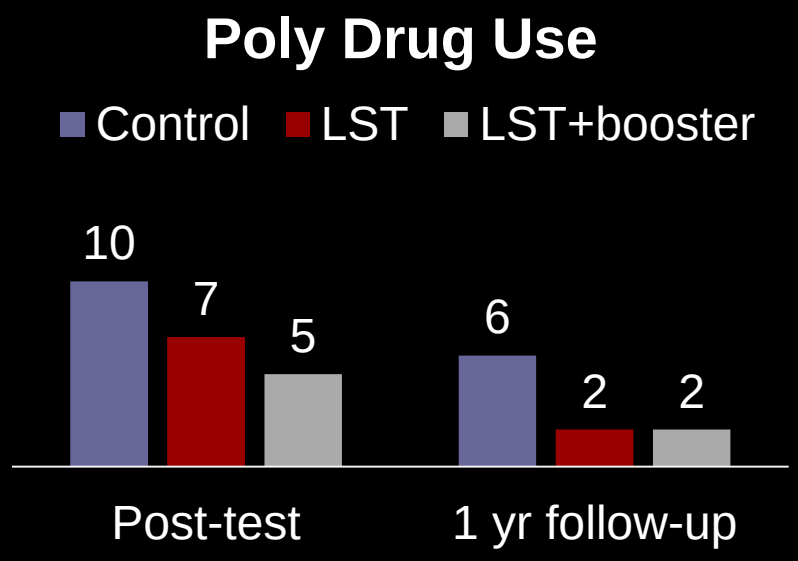


Spoth, et al 2004.

*previously called *Preparing for the Drug Free Years*

Life Skills Training (LST) Outcomes





60% reduction in alcohol, cigarette and marijuana use 3 years later for students whose teachers taught at least 60% of the curriculum

Botvin et al., 1990; Botvin, Baker et al., 1990

Project Toward No Drug Abuse

At 1-year follow-up of a study using an expanded 12-session TND curriculum, students in Project TND schools exhibited a reduction in marijuana use of 22% ($p < .05$) compared to students in control schools.

At 2-year follow-up, students in Project TND schools were about 20% as likely to use hard drugs ($p = .02$) and, among males who were nonusers at pretest, about 10% as likely to use marijuana (odds ratio = 0.12, $p = .03$), compared to students in control schools.

Future recommendations

- Focus on the specificity of early predictors of marijuana use
- Examine marijuana specific outcomes
- Address those most vulnerable populations and communities
- Continue to build capacity for local communities to address their needs with EBPs
- Ensure EBPs are implemented with fidelity
- Continue to innovate and test community level programs that may impact marijuana use

The State of Preventive Interventions & What We Know Works in Prevention

Kevin Haggerty, Ph. D.
Richard F. Catalano
Social Development Research Group,
University of Washington,
School of Social Work

Thanks to Julia Greeson, Division of Behavioral Health and Recovery