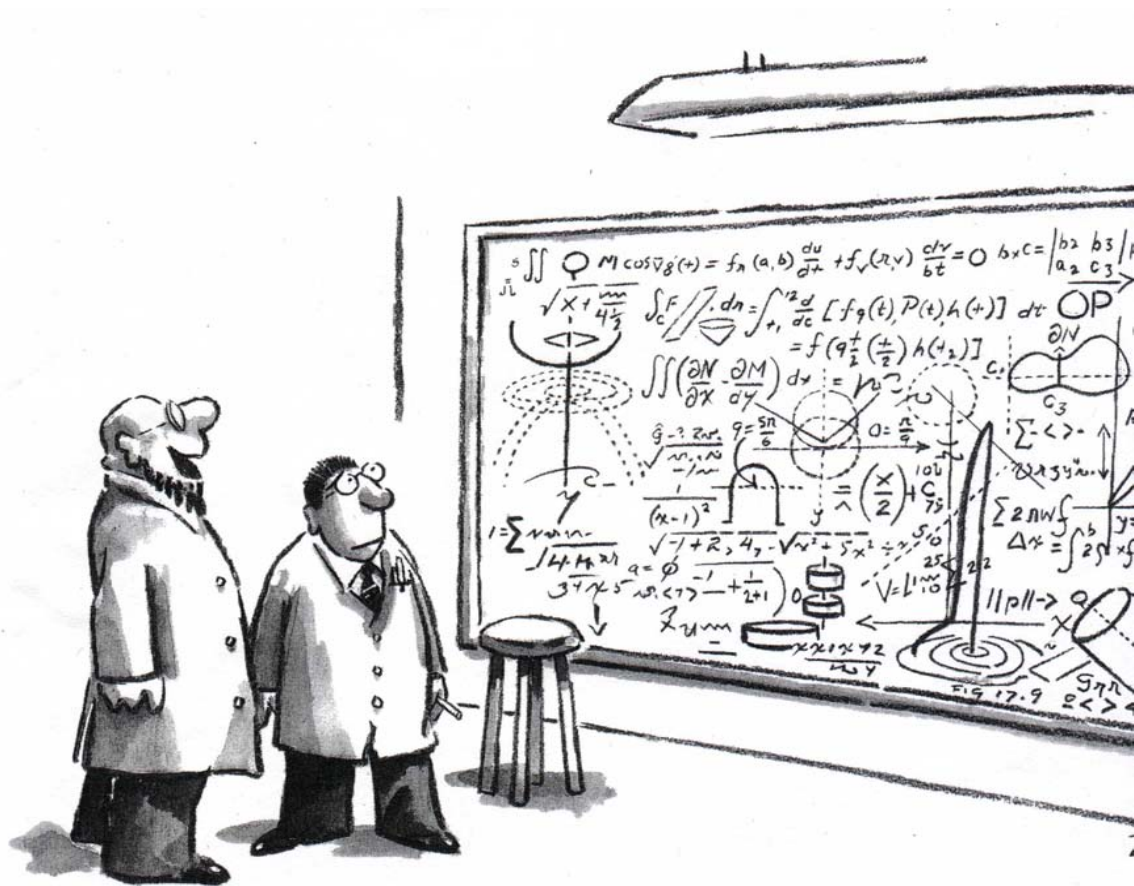


# Making Sense of Research

## Jane Adams & David Osher



"Hey, no problem!"

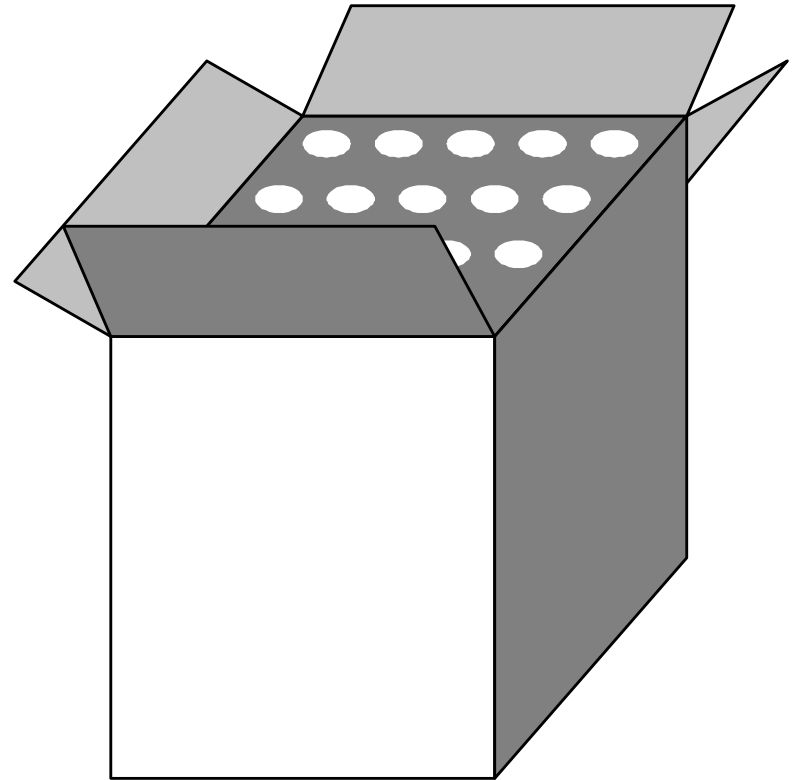
# I Evaluation

- What you want to evaluate and Why?
- What was done ?  
(formative)
- What Was Accomplished ?  
(summative)
  - What works?
  - What does not work?
  - What has harmful impacts?
  - What has not yet been shown to work/not work/do harm?



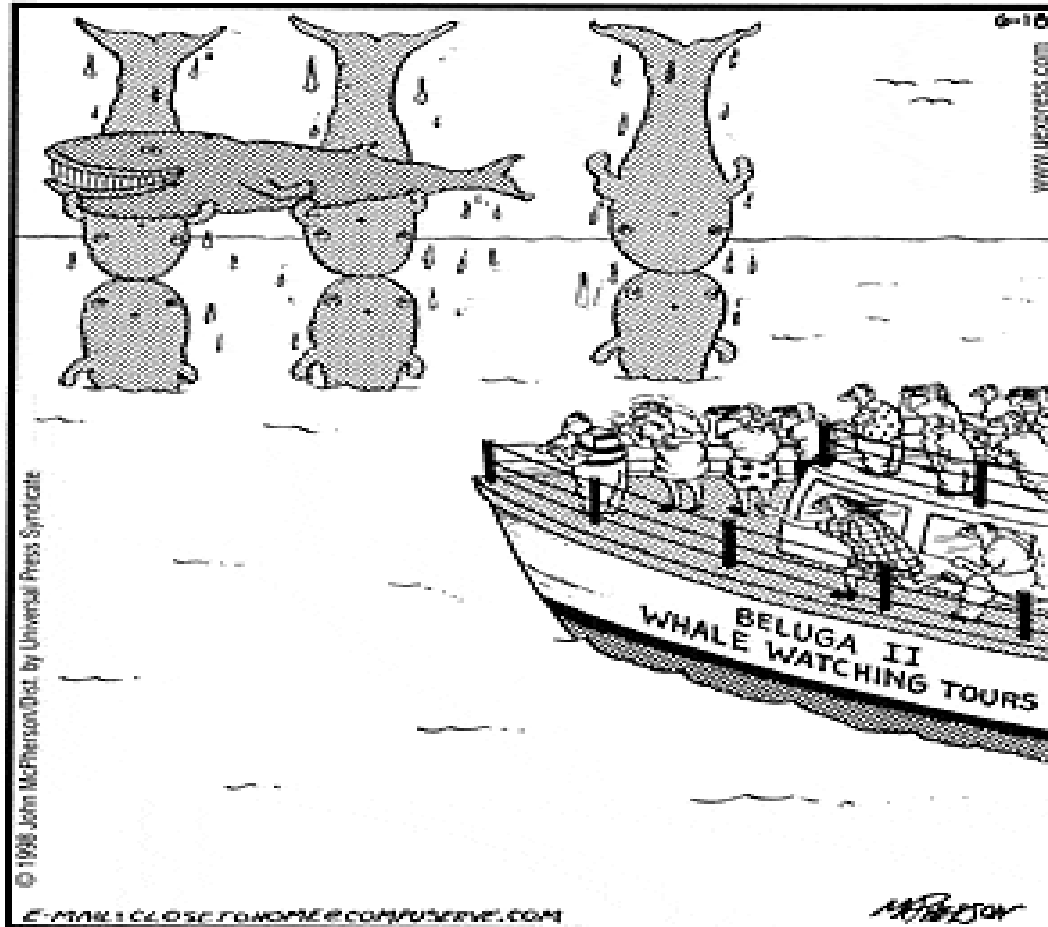
# Unpacking the Components of An Intervention

- What is it that really makes the difference?
- Example: can wraparound work without being family and youth driven?



# II Research Design

# Were the Tools Appropriate to Document and Study What Happened?



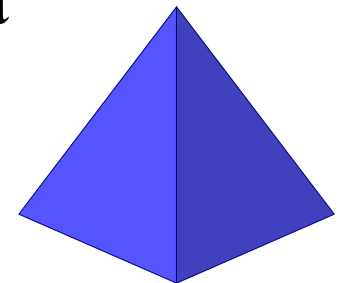
"What do you mean you forgot to buy film?!"

# Research Design: Bottom Line

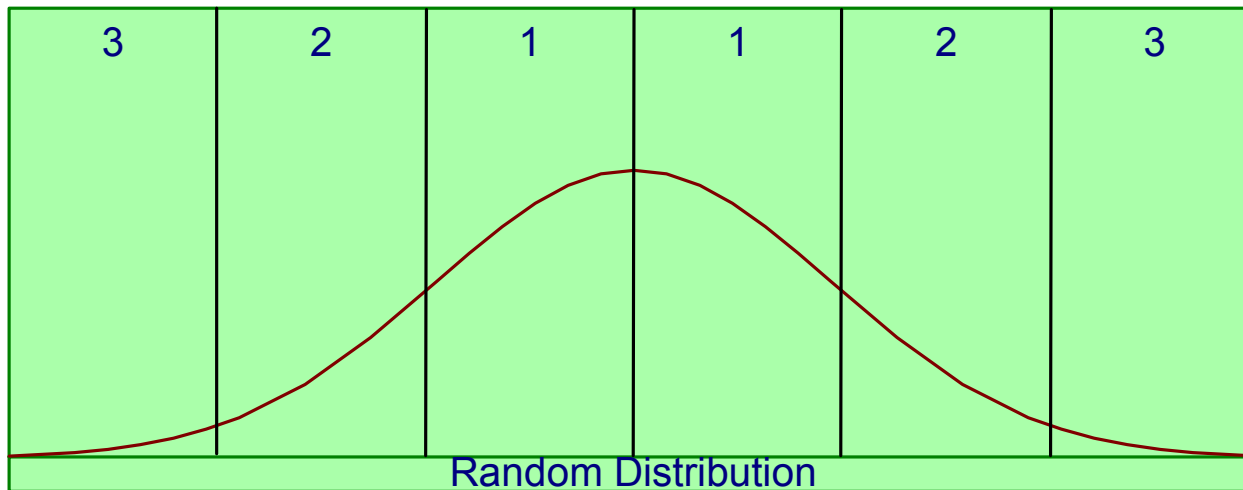
- Does it address the right questions?
- Are its theoretical underpinnings clear?
- Are its concepts “operationalized”?
- Does it test what you are trying to measure?
- Are Biases Controlled For?
  - Selection Bias
  - Observational Bias
  - Reporter Bias

# Research Design: Bottom Line

- Are measures, measurers, and measuring tools consistent?
- Are statistical measures and analyses appropriate?
- Are observations “triangulated”?
- Are there sufficient grounds for drawing a conclusion?



# Random Distribution and Statistical Significance



# III Trusting Research Studies

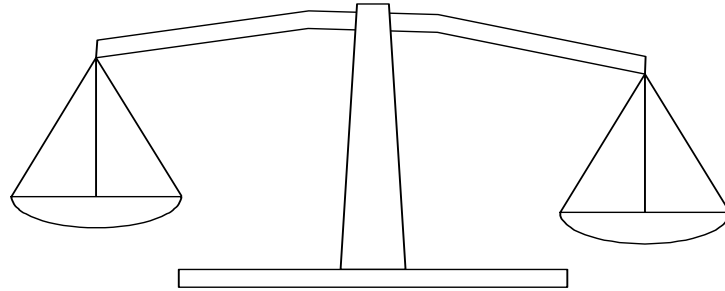
- Is there clarity regarding the limits of the study (ies)?
- Is there reason to believe that the researcher(s) are objective
  - E.g., the logic of double-blind studies
- Have they been reviewed by appropriate people and the design and findings found to be credible?
  - Objectivity
  - Expertise
- Have the findings been replicated?

# Does the Research Identify Targets That Can Guide Intervention?



**"Are you insane?! When I said I smelled an odor, I meant you should change his diaper, not slap one of those deodorizing discs on him!"**

# IV Using Intervention Research



# The Institute of Medicine's Continuum of Prevention, Treatment, & Maintenance

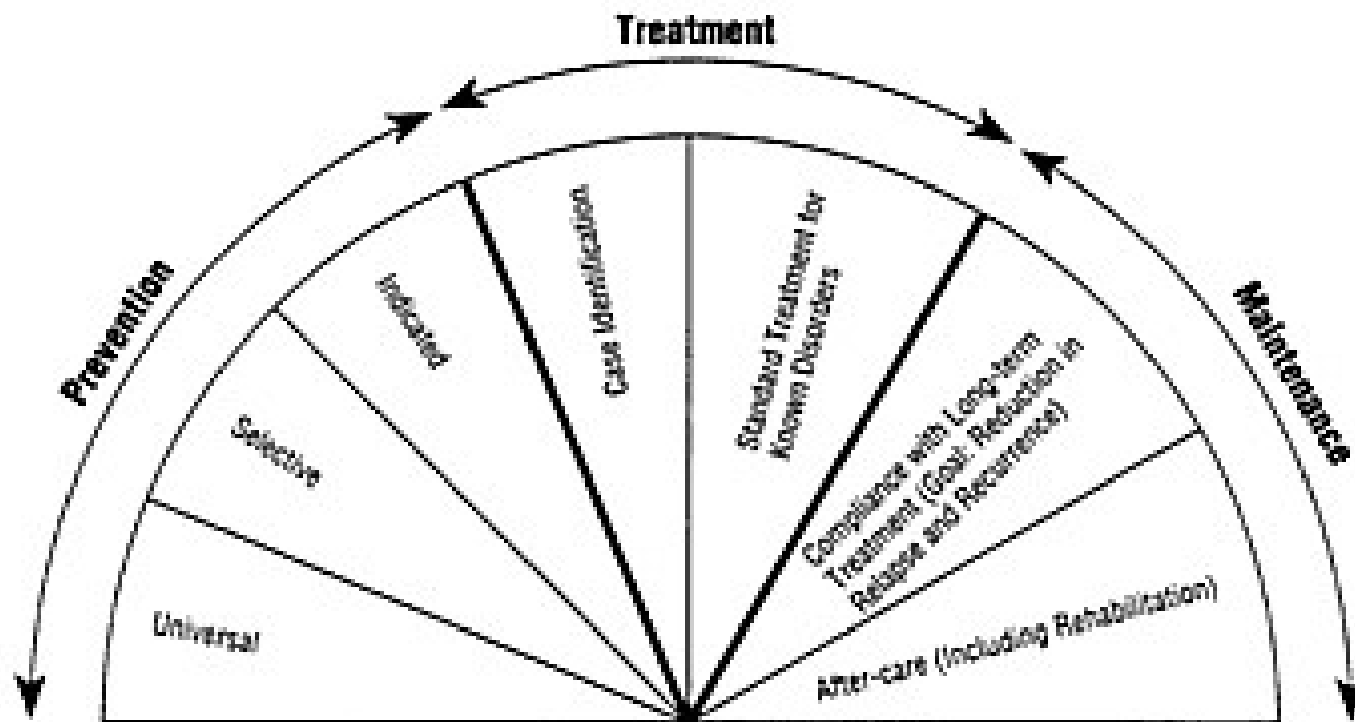
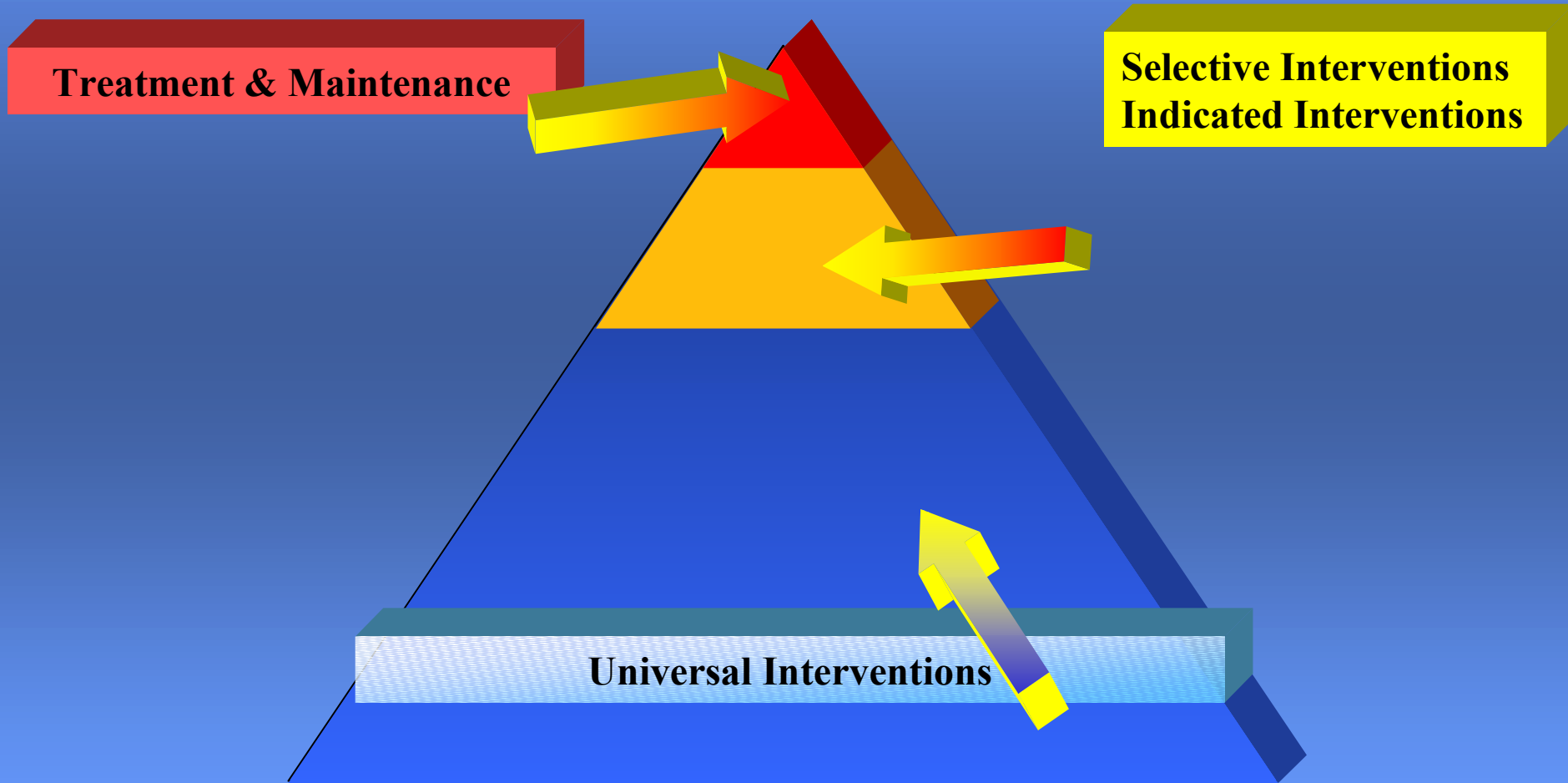
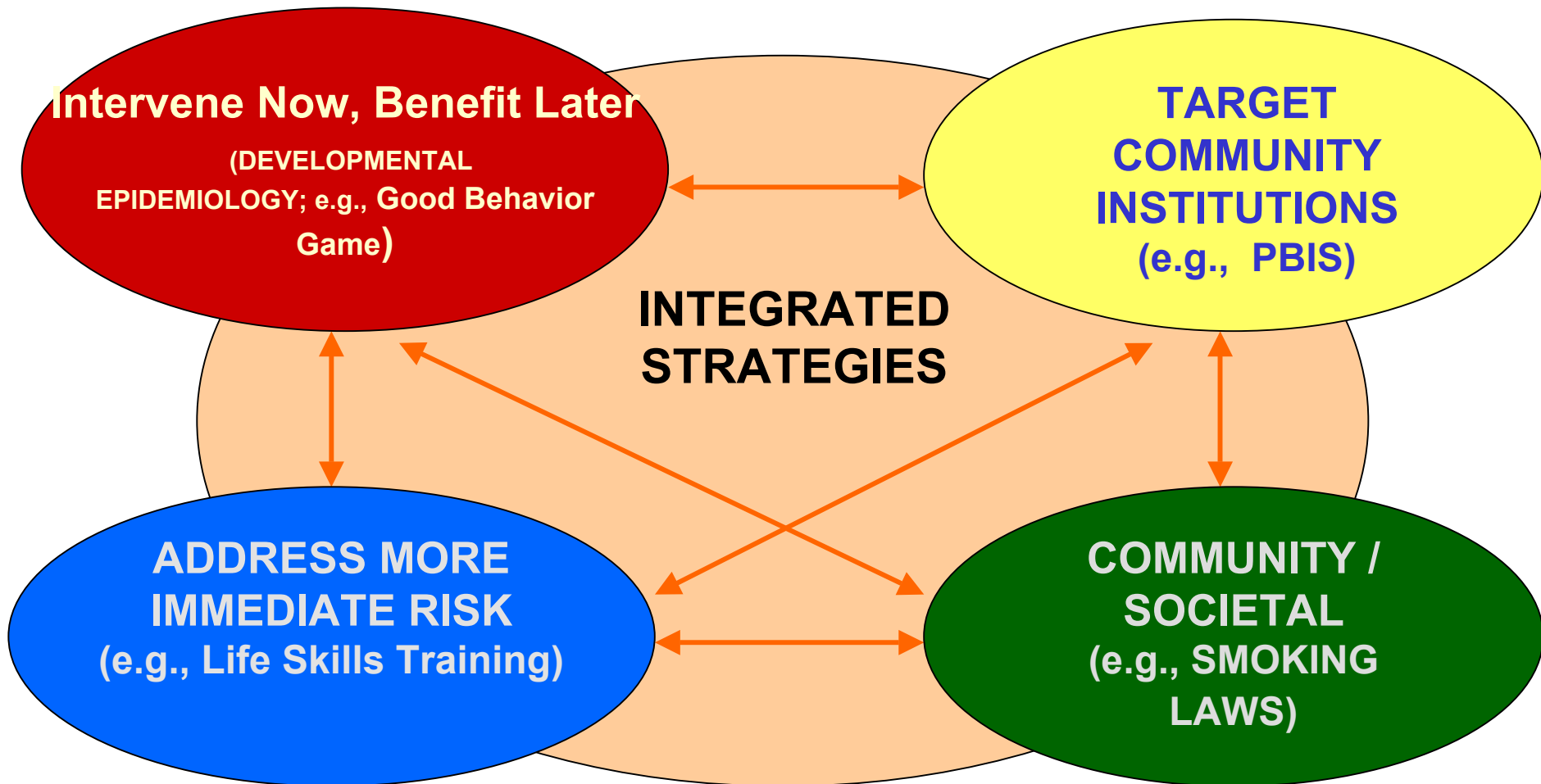


FIGURE 2.1 The mental health intervention spectrum for mental disorders.

# Prevention and Intervention



# Prevention Over Time And Space: Integrating Prevention Science Strategies



# What is the Target of the Intervention?



- Which Risk Factors
- Which Protective Factors

# V Evaluating Intervention Research

- **Was there a Control Group or Comparative Design?**
- **Is there evidence from at least two testing periods (before and after the intervention)?**
- **Were there positive changes in the treatment group?**
- **How powerful were the changes?**
- **How long were they sustained?**
- **Were these interventions effective in real world conditions—Effectiveness Research**

# THE EFFICACY/ EFFECTIVENESS GAP: DID THE STUDY FORGET THE WATER?



- **The significance of the water**
- **2 dangers:**
  - Context stripping
  - Ignoring the role of context
- **Contextual factors**
  - Readiness
  - Capacity to implement
    - explicit
    - intrinsic, but important

# THE EFFICACY/ EFFECTIVENESS GAP: DID THE STUDY INCLUDE THE RIGHT FISH?



- Which children were included in the study?
- Did it exclude children with co-occurring disorders?

# DID THE STUDY INCLUDE THE RIGHT FISH?

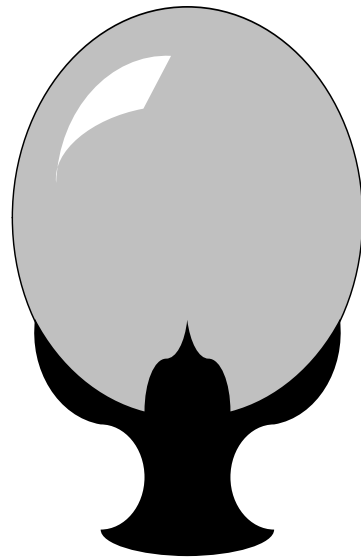


- Did it address cultural differences or provide information that can be employed to address cultural differences?
- Did it address variation in impact among different individuals who received the treatment?

# Variation of Impact: Examples

- Good Behavior Game
  - Look at class as a whole--no impact
  - Look at the most aggressive kids--impact
  - Look at girls--no impact
  - Look at boys—impact
- MST
  - Youth with serious antisocial behavior – yes (4 studies)
  - In psychiatric crisis-no (1 study)

# VI Using Evidence to Select The Right Interventions



# Program Evaluation Criteria



- Outcomes;
- Information on differential effects;
- Cost;
- Staffing implications;
- Flexibility;
- Compatibility;
- Implications for instructional time;
- External support needed & available.

# Intervention Selection Calculus

**X** intervention works with

**Y** children and youth

In **Z** context.

When you do:

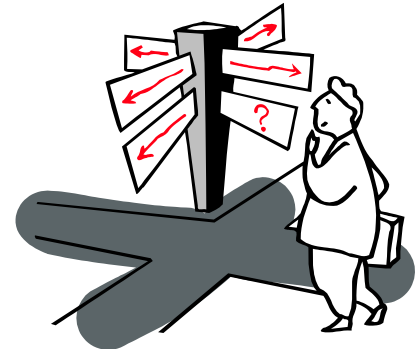
**A, B, & C**

and you don't change

**D & E**

or add

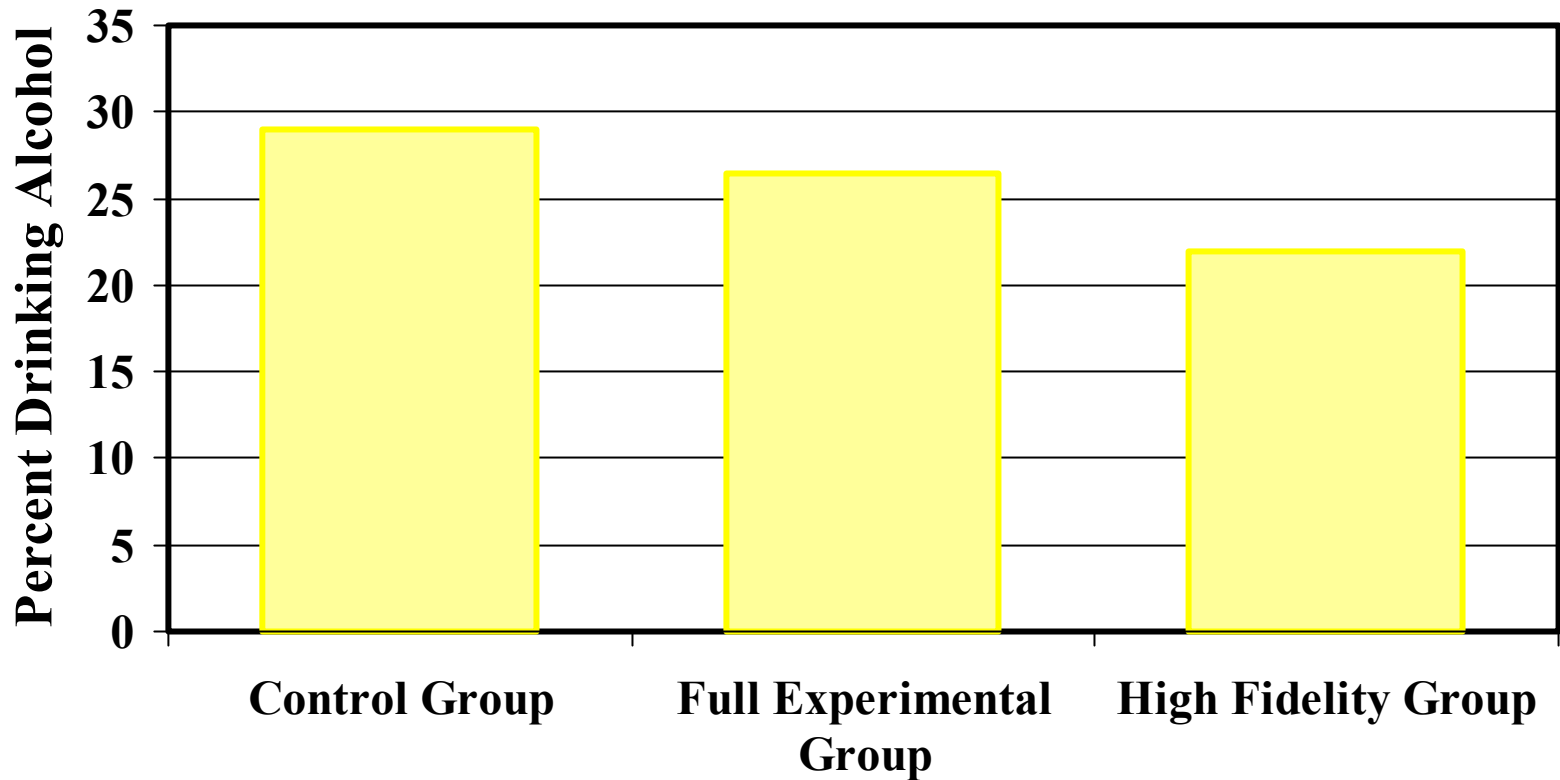
**F & G**



# VII Fidelity of Implementation

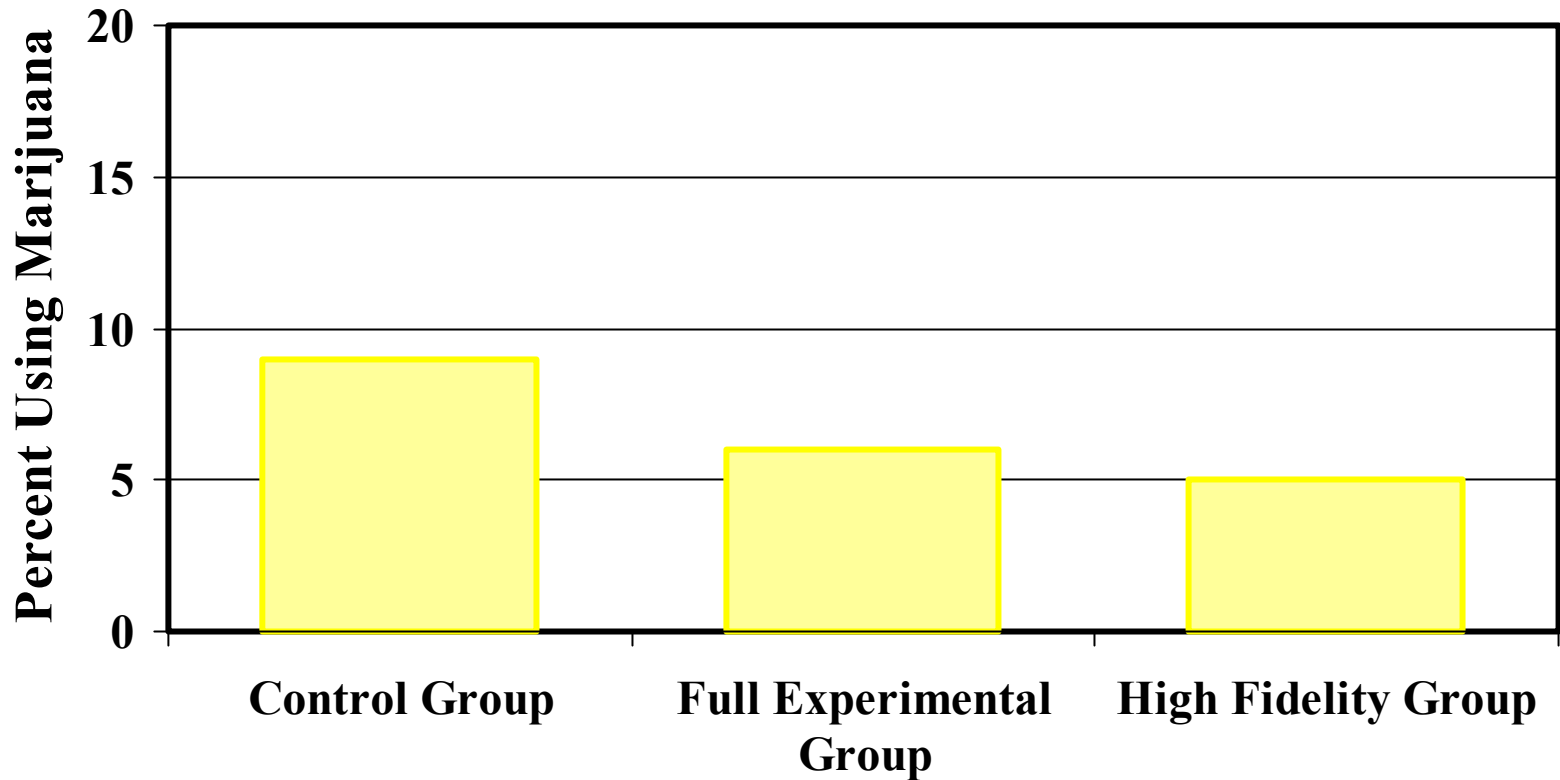
- The Lesson of The School Development Project
- The Challenge of Wraparound

# Effects of Fidelity on Alcohol



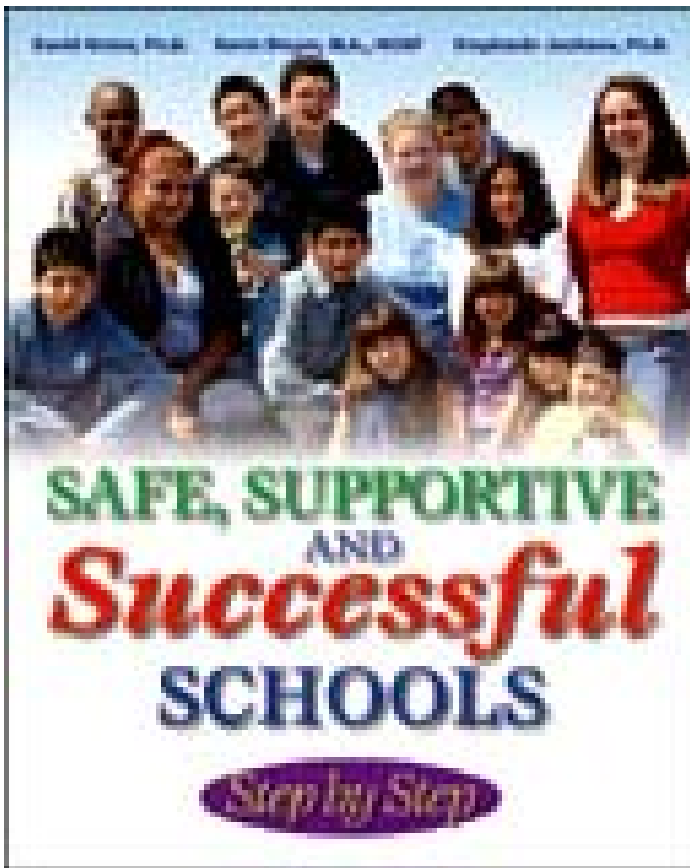
Source: Botvin,G.J., Baker,E., Dusenbury,L., Botvin,E.M., Diaz,T. (1995). JAMA, 273, 1106-1112.

# Effects of Fidelity on Marijuana

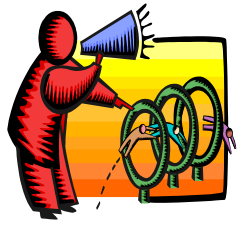


Source: Botvin,G.J., Baker,E., Dusenbury,L., Botvin,E.M., Diaz,T. (1995). JAMA, 273, 1106-1112.

# VIII How to Access Evidenced Based Practices: Where to Go

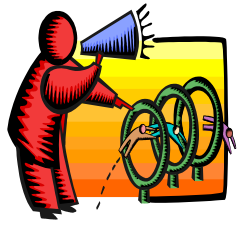


- **Safe, Supportive and Successful Schools Step by Step**
- See Websites listed in the handout.
- <http://www.sopriswest.com/>



## RESOURCES: MATERIALS

- *Briefs for Families on Evidenced Based Practices*, ([www.air.org/cecip](http://www.air.org/cecip))
- *Safe & Sound* (CASEL)
- *Safe, Drug Free, and Effective Schools: What Works!* ([www.air.org/cecip](http://www.air.org/cecip))
- Vignettes on Assistive Technology, Teaching Exceptional Children, 1998-2000 Osher, Quinn, Poirer, & Rutherford (2003), *Deconstructing the Pipeline to Prison, New Directions in Youth Development* (Number 99), pp. 91-119.



# RESOURCES: TA Centers & Websites

- National Center for Mental Health Promotion and Youth Violence Prevention (website and link to technical partners)—  
[www.promoteprevent.org](http://www.promoteprevent.org)
- Center for Effective Collaboration & Practice—[www.air.org/cecp](http://www.air.org/cecp)
- National Coordinator Training and Technical Assistance Center—  
[www.k12coordinator.org](http://www.k12coordinator.org)
- Technical Assistance Partnership for Child & Family Mental Health—  
[www.air.org/tapartnership](http://www.air.org/tapartnership)