IMPLEMENTING EVIDENCE-BASED PREVENTION BY COMMUNITIES TO PROMOTE COGNITIVE, AFFECTIVE, AND BEHAVIORAL HEALTH IN CHILDREN: A WORKSHOP

Panel 3: Programs Versus Principles: What Does the Evidence Tell Us?

Stephen V. Gies, Ph.D.
Senior Researcher, CrimeSolutions.gov
Program Review Manager, NREPP
Development Services Group, Inc.

National Academies of Sciences, Engineering, and Medicine
Forum on Promoting Children's Cognitive,
Affective and Behavioral Health

Washington, DC June 9-10, 2016

Definitions

- Program: A planned, coordinated, and prescribed group of activities and processes designed to achieve a specific purpose (CrimeSolutions.gov)
- Practice: A general set of programs, strategies, or procedures that share similar characteristics with regard to the issues they address and how they address them (CrimeSolutions.gov)
- Principles (aka components, kernels, active ingredient):
 A kernel is a behavior—influence procedure shown through experimental analysis to affect a specific behavior and that is indivisible in the sense that removing any of its components would render it inert (Embry and Biglan, 2008)

Within Programs vs Across Programs (practices)

PRACTICE Z	COMPONENT 1	COMPONENT 2	COMPONENT 3	REVIEW OUTCOME
Program A	X	X	X	Program A Effectiveness
Program B	X			Program B Effectiveness
Program C		X		Program C Effectiveness
Program D			X	Program D Effectiveness
Program E	X	X		Program E Effectiveness
Review Outcome	Component 1 Effectiveness	Component 2 Effectiveness	Component 3 Effectiveness	Practice Z Effectiveness

Strengths and Weakness of Practice Approach

Strengths

- Integrates similar programs, multiple versions, and adaptions
- > Analyzes effect of moderators (i.e., active ingredients, kernels, etc)
- Summarizes evidence into a single statistic (effect size)
- > Estimates magnitude
- Increases power and precision

Weaknesses

- Compares apples to oranges (heterogeneity)
- Subject to selection bias
- Requires "uncommon" statistical expertise
- Difficulties of interpretation
- Requires point estimates (no growth curve models, etc.)