

Implementing Evidence-Based Programs: Promise and Practice

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by

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Prevention Research-1985*

Romig, *Justice for Our Children*, 1978

- Casework: No evidence of effectiveness
- Behavior Modification: Limited success, but should not be used for juvenile offenders
- Teaching Academic Skills: Not effective
- Work & vocational Training: Not effective
- Group Counseling: Not effective
- Individual Psychotherapy: Not effective
- Therapeutic Camping, Diversion, Probation: Not effective

- See also: Martinson, 1974; Lipton et al., 1975; Sechrest et al., 1979
Wright and Dixon, 1977.

Prevention Research-2009

- Better theory development and evaluation methodology & practice
- A growing number of programs demonstrated to be effective
- Increasing public & government support for evidence-based programs
- Confusion over scientific standard for evidence-based certification
- Limited dissemination of EB programs
- Relatively little attention to fidelity

Prevention Research- Agenda for Next 20 Years

- Establish consensus on scientific standard for certifying effective programs
- Upgrade program evaluation design, methodology and reporting
- The new research frontier: dissemination and implementation
- Address the barriers to dissemination & implementation of evidence-based programs

Confusion over standard

Defining evidence-based

U.S. Federal Agency Lists of EB Programs

- Center for Mental Health Services (2000)
- National Registry (NREPP) (2002)
- Office of Safe & Drug Free Schools (2001)
- Blueprints for Violence Prevention (2007)
- National Institute of Drug Abuse (2003)
- Surgeon General Report (2001)
- Helping America's Youth (2007)
- OJJDP Title V (2007)

Consensus Across 8 Federal Lists

- No program appeared on all lists
- Only one program (LST) appeared on 7 of 8 federal lists as a model/exemplary/Level 1 program*
- Two programs were on 5 lists: MST & TND
- 4 Programs on four lists: ALERT, ATLAS, Early Risers for Success, & FFT
- 11 Programs on 3 lists: BBBS, GBG, TNT, PATHS, MTFC, NFP, Project Northland, Focus on Family, Strengthening Families, Caring School Communities, Incredible Yrs.

* Top category on each list.

Federal Working Group Standard for EB Certification*

- Experimental Design/RCT
- Effect sustained for at least 1 year post-intervention
- At least 1 independent replication with RCT
- RCT's adequately address threats to internal validity
- No known health-compromising side effects

Hierarchical Program Classification*

- I. *Model*: Meets all standards
- II. *Effective*: RCT replication(s) not indep.
- III. *Promising*: Q-E or RCT, no replication
- IV. *Inconclusive*: Contradictory findings or non-sustainable effects
- V. *Ineffective*: Meets all standards but with no statistically significant effects
- VI. *Harmful*: Meets all standards but with negative main effects or serious side effects
- VII *Insufficient Evidence*: All others

*Adapted from *Hierarchical Classification Framework for Program Effectiveness*, Working Group for the Federal Collaboration on What Works, 2004.

Defining "Evidence-Based"

- Programs classified as Model, Effective, or Promising on Federal Hierarchy
- Consistently positive effects from Meta Analyses
- Only Model programs should ever be taken to scale

Recommended Lists of Evidence-Based Programs: AS Behavior

- Blueprints (OJJDP): Model or Promising (100%)
- NIDA: Effective (60%)
- OJJDP Title V: Exemplary (54%)
- Office of Safe and Drug Free Schools (DOE): Exemplary (67%)
- HAY (OJJDP): Level 1 (58%)

**The new research frontier:
dissemination and
implementation**

...very little is known about the processes required to effectively implement evidence-based programs on a national scale.

Research to support the implementation activities that are being used is even scarcer.

**National Implementation Research
Network, 2007**

Blueprints for Violence Prevention Replication: Factors for Implementation Success

Mihalic et al., 2004. Funded by
OJJDP

Program Implementation

- Program Dissemination
- Program Fit
- Site Preparation
- Training
- Technical Assistance
- Program Fidelity/Adaptation
- Predictors of Program Quality
- Program Sustainability

PROGRAM DISSEMINATION CAPACITY

- Published material: Handbooks, curriculum, manuals, etc.
- Certification of trainers
- High quality, packaged T.A.
- Process evaluation measures
- Dissemination Organization: Dedicated to marketing and delivery
- Data management system in place

PROGRAM FIT

- Does the program address the needs and existing barriers to learning at this school?
- Has it been demonstrated effective for the type of community/school/students that will be involved?
- What level of certification does the program have? [many pushed prematurely with only efficacy trial]

SITE PREPARATION

- Most failures due to limited site capacity
- Critical elements: Local champion, administrative support, organizational stability, community credibility and routinization potential
- Develop clear expectations and contracts

TRAINING

- Hire all staff before training
- Hold line on requisite training
- Review program plans with staff before training
- Have administrators attend training
- Plan and budget for staff turnover
- Implement immediately after training

TECHNICAL ASSISTANCE

- Quality declined over time
- Lack of proactive delivery
- T.A. providers hard to reach, slow response
- School-based programs delivered best
- Family-based most consistent & proactive
- Variation in perceived need by program type

FIDELITY COMPONENTS

- Adherence: Delivered as designed/evaluated
 - BP; 86%-100%; LST- 81%-86%
- Exposure/Dosage
 - School BP-33%-50%; LST- 56%-78%
- Quality of Program delivery
- Participant Responsiveness

Fidelity vs Adaptation

- Need for local adaptation is over estimated
- Adaptations must fit with program rationale
- Language/cultural adaptations most easily justified
 - But little evidence to date for race/ethnicity, gender, or class differences in program effects
- Most frequent threats to fidelity:
 - Frontline implementers
 - Disseminating Agency

Fidelity vs Adaptation

- Adaptation is as likely to reduce effects as enhance them
- Local adaptation may increase “buy in” but also creates uncertainty about program effects
- Program success must be judged by real changes in behavior, not number of adoptions or survival

Overcoming barriers to widespread dissemination

Why Are We Not Implementing EB Violence Prevention Programs?

- It's hard to sell prevention- the focus 'typically' is on improving *responses* to violence
- Programs not addressing strongest risk/protective factors or clusters
- Confusion about standard for EB certification
- Politics and parochial judgment often trump research
- Increasing professional resistance to EB programs/practices
- Failure to implement with fidelity

Professional Resistance

- "I particularly enjoyed your most recent article warning about the potential tyranny of evidence-based practices ... I think you underplayed the possibility that an emphasis on such programs can inadvertently undermine rather than enhance school-wide reform efforts. ...there is virtually no evidence that evidence-based practices contribute to overall school effectiveness, as data on such an issue are never gathered."

Unidentified "well-respected scientist", Enews, August, 2007 (Vol 11, #11)

Demonstrated Effects of EB Programs on School Effectiveness

- Improved Student Health
- Lower Rates of Dropout
- Higher Academic Test Scores
- Greater Gains in Academic Performance over time
- Reduced bullying, drug use and AS behavior

Controlling for grade in school, race/ethnic composition, % subsidized meals, average parent education, %ESL students

Demonstrated Effects of EB Prevention Programs Con'td

- Lower Absenteeism
- Lower High School Dropout
- Higher Parent Involvement
- Fewer Suspensions
- Fewer Special Education Referrals
- Fewer School Behavioral Incidents
- Improved Social Competence
- Higher Participation in After School Activities

■ CSAP Model's Academic Outcome Measures and Proven Outcomes, 2002

NREPP: What is Evidence-Based?

- One concern is that too much emphasis on EB P's may in some cases restrict practitioners from exercising their own judgment to provide the best care for individuals. For this reason, many organizations have adopted definitions of EB practice that emphasize balancing the "scientific" with the "practical."

National Survey of U.S. School-Based Programs

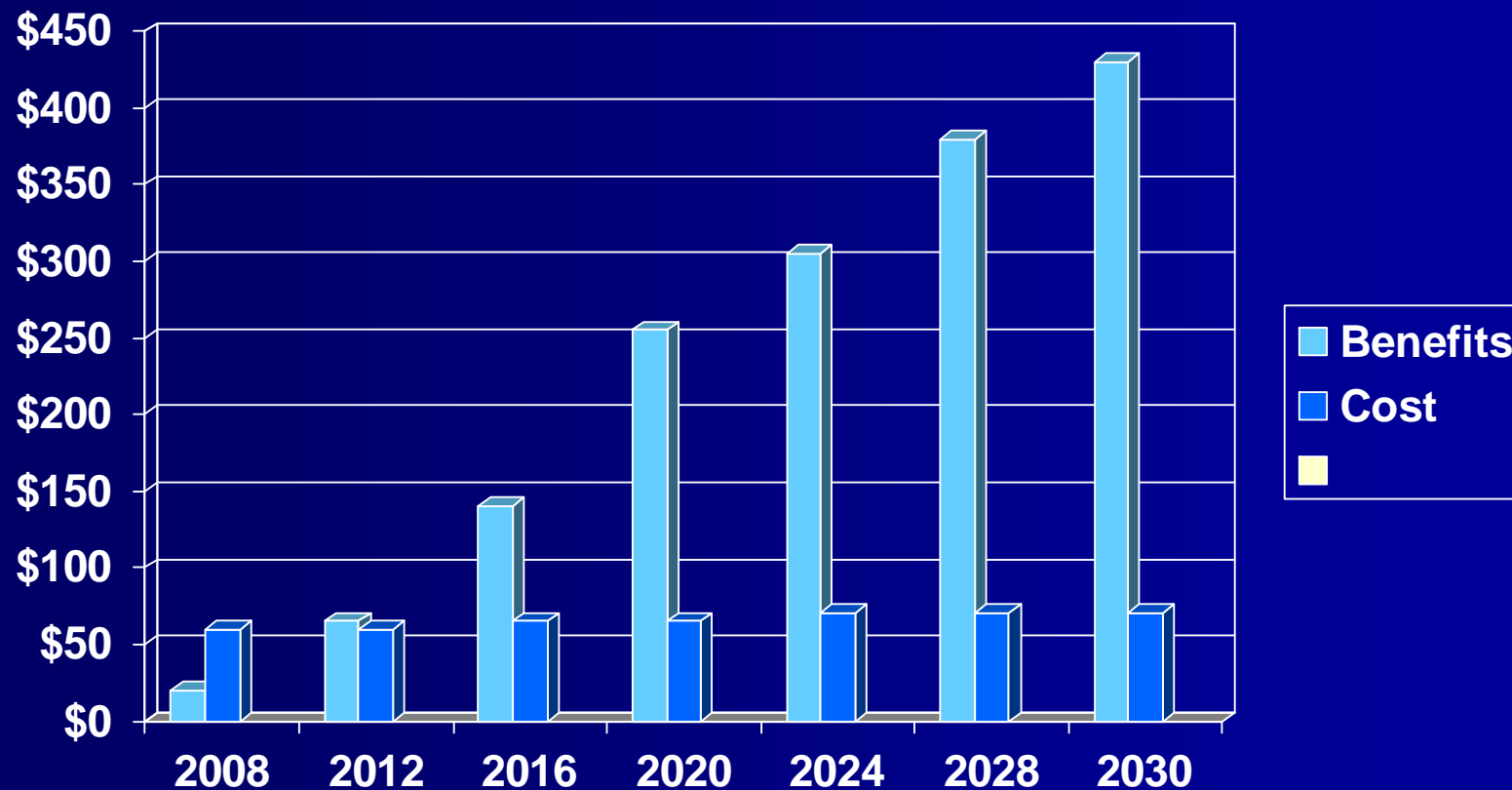
- Over two-thirds of schools reported use of at least one substance abuse program; almost half reported using 3 or more programs.
- Only 26.8% of schools were implementing an evidence-based substance abuse prevention program.
- In general, the quality of school-based prevention (delinquency, substance abuse, violence) practices is low.

Feasibility Example

- Cost to provide every student in U.S. a model drug prevention program like LST is \$550 million per year
- Current national drug control spending is approximately \$40 billion per year
- This represents 1.5% of the current drug control spending

The Benefits of Implementing Evidence- Based Programs

Annual Taxpayer Costs & Benefits: Forecast with Moderate Portfolio of Evidence-Based Programs



Cost Benefit: Redirection Project [Florida]*

- Reduced Likelihood of Re-arrest
 - Felony Arrest – 14%
 - Felony Adjudication/Conviction – 33%
 - Any recommitment – 36%
- Savings in Justice Sys. Processing – 2.4M (3yrs)
- Savings in Residential Costs - \$14.4 M (3yrs.); \$40M (5yrs)
- Savings per Offender Completion - \$28,500

*Office of Program Policy Analysis & Government Accountability, Report No. 08-41. June 2008. State of Florida. Involves MST and FFT; results over 3.5 years. MST and FFT model programs.

Conclusions

- We Need A Uniform Scientific Standard For Certifying "Evidence-Based" Programs
- Existing Federal Lists Provide Some Guidance, But Programs Other Than Those In The Top Category Are Often Problematic
- EB Program Should Be Selected For Its Known Effect On Particular Risks & Protective Factors For Specific Groups
- If You Decide To Use A Program Not Certified as EB, You Must Commit To Evaluating It
- Do Not Use Any Program Found to Be Ineffective or Harmful

THANK YOU

- Center for the Study and Prevention of Violence
- www.colorado.edu/cspv

Referenced Websites

- NREPP: www.nationalregistry.samhsa.gov
- Blueprints: www.colorado.edu/cspv
- OSDFS:
www.ed.gov/admins/lead/safety/exemplary01/panel.html
- NIDA:
www.drugabuse.gov/pdf/prevention/RedBook.pdf
- OJJDP Title V:
www.dsgonline.com/mpg2.5/mpg_index.html
- CMHS:
www.prevention.psu.edu/pubs/Mental_Health_pbs.html
- Surgeon General:
www.surgeongeneral.gov/library/youthviolence/default/html