



A low-cost, low-burden model for improving implementation quality: a pilot efficacy study in school-based prevention



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Pennsylvania's EBP dissemination in 2013...

Map Layers

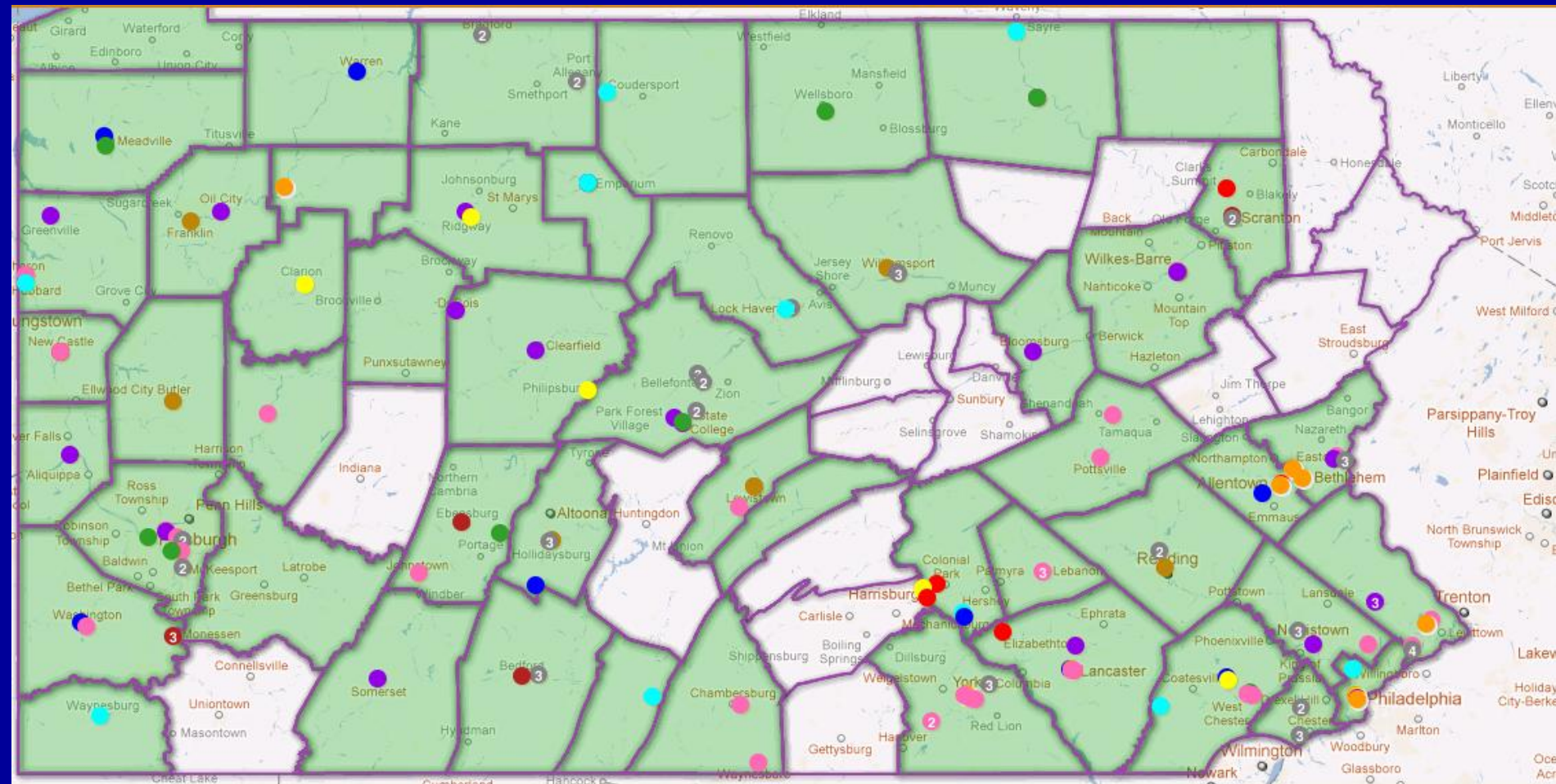
Grant Programs

- Select all types
- BBBS MTFC FFT IYS LST
- MST OBPP PATHS SFP Other

Numbers within markers indicate the number of grants awarded to the agency. Markers without a number indicate agencies with only 1 grant.

Boundary Layers

- Counties State House Districts
- School Districts State Senate Districts



The Menu of EBPs We're Scaling-up

- Olweus Bullying Prevention Program (OBPP)
- Promoting Alternative Thinking Strategies (PATHS)
- Big Brothers Big Sisters of America (BBBS)
- Multidimensional Treatment Foster Care (MTFC)
- Strengthening Families Program 10-14 (SFP)
- Project Towards No Drug Abuse (Project TND)
- **Life Skills Training (LST)**
- Incredible Years (IYS)
- Functional Family Therapy (FFT)
- Multisystemic Therapy (MST)
- Aggression Replacement Training (ART)

ACHIEVING | SUSTAINABLE
& EFFECTIVE
Violence
Prevention

Blueprints

FOR VIOLENCE PREVENTION



P E N N S Y L V A N I A
C O M M I S S I O N O N C R I M E A N D D E L I N Q U E N C Y

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the school districts of Bedford County, PA

UNDER STRICT LABORATORY
CONDITIONS, RESEARCH CONCLUDES
THAT, IN SPITE OF BEING WATCHED,
POTS DO EVENTUALLY BOIL.



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DISNEY

Background

- Correlation between implementation fidelity/quality and positive outcomes
- High quality implementation less common in natural settings & adaptations often weaken interventions
- Systematic monitoring of implementation quality and fidelity is uncommon outside the research context
- Great variability across implementers
- Limitations of the traditional training and TA paradigm in large-scale diffusion and in classroom interventions

LEEP-LST Study:

Standardized Mean Fidelity Score by Implementer

(Bumbarger & Miller, 2007)

Implementer	Mean Fidelity	N	Std. Dev	Minimum	Maximum
Police Officer Only	62.47	29	18.27	27.5	94.7
Teacher Only	65.25	13	11.81	43.4	85.1
Team Taught	72.03	12	16.62	47.8	94.3

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LST Implementation Support Study

Study Purpose

- Develop and test the efficacy of a low-cost, low-intensity model for providing implementation support
 - Must require little effort and investment on the part of implementers (classroom teachers)
 - Must not result in significant additional cost to implement the program

LST Implementation Support Study

Study Hypothesis

Teachers who participate in the brief intervention will have higher mean levels of implementation quality and fidelity, and less variability across implementers

Pilot Study Design

- Botvin's LifeSkills Training classroom-based drug and violence prevention curriculum
- 19 classroom teachers from 6 schools in one Pennsylvania county
- Joint (standard LST) pre-implementation training
- Random assignment to implementation support or "typical" condition
- Implemented with ~3,000 students during one school year
- Baseline assessment, teacher self reports, videotaped observations, student pre- and post-surveys

Intervention

- Weekly 20-minute facilitated group discussion via web-based video conference
 - Facilitator was a research assistant with a knowledge of the curriculum and basic tenets of prevention science
 - Review last lesson, then focus on upcoming week's lesson(s)
 - Goals, key points & activities
 - Where does the lesson fit in the logic model?
 - Suggestions for interactive teaching and problem solving
- Lesson-specific podcasts accessed individually
 - 2-3 minute audio review accompanied by 2-3 slides

Post-training Baseline Assessment

- No statistically significant baseline differences between groups
 - Demographics/personal characteristics
 - Experience (general teaching and prevention)
 - Prevention knowledge
 - Perceptions re prevalence of adolescent ATOD use
 - Motivation/support for implementing LST
 - Perceived efficacy of the program

Teacher Reports of Implementation

Significant group differences favoring the intervention (implementation support) group on:

- Completion of the lesson
- Students' attitude toward the curriculum
- Students' sustained interest in the program materials and activities
- Students displaying appropriate/on-task classroom behavior
- Students' willingness to discuss and process the lesson

No significant differences favoring the comparison group

Videotaped Observations

- Every lesson in both conditions videotaped
- ~ 140 videotaped lessons blind coded by nationally-certified LST trainers
- 16 items measuring fidelity/adherence, quality of delivery, and participant responsiveness

Coded Observation Findings

- 10 of 16 measures significantly favored the intervention group
 - Percent fidelity/adherence to content (I=76, C=65)
 - Teacher's positive attitude toward the curriculum
 - Teacher maintains order in the classroom
 - Teacher has class deal with questions
 - Students were engaged and participated in discussion
 - Teacher asked open-ended questions
 - Teacher used encouragement & positive reinforcement
 - Teacher encouraged involvement and participation
 - Teacher stimulated active discussion among students
 - Global rating of teacher's overall delivery of the lesson
- No measures favored the comparison group even at a trend level

Discussion

- Supports the hypothesis that forms of inexpensive, low-intensity support may be effective at improving implementation quality
- Reinforces the assumption that the traditional training/TA/coaching paradigm can be re-conceptualized and improved
- Provides a potential model for planning the scaling-up of interventions
- Demonstrates the utility of videotaped observation to assess implementation quality

Barriers & Limitations

- Sample size and program type may limit generalizability
- No clear dose-response relationship across implementers
- No intervention x condition effect at the student level
- Issues related to matching implementation schedules across schools
 - Asynchronous model may be a better fit

Thank You!

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