Population Impact Challenges and Strategies: Illustrations from PROSPER Universal Prevention Research

Effective Programs and Interventions: The Science of Program Evaluation (Panel 4)

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Purpose and Objectives

Some considerations in addressing the “big question” of how to best achieve impact with military families, drawing on knowledge about evidence-based, universal preventive interventions and delivery systems.

I. Context – Translation science and population impact

II. Illustrations from knowledge base – Evidence-based universal intervention and PROSPER delivery system

III. Possible future directions – High priority translation science, example of PROSPER for military families
A Framework for Addressing the Question: Translation Science to Population Impact (TSci Impact)

Two Windows of Opportunity for Universal Intervention in the Case of Substance Misuse

Wide-ranging Substance Misuse Prevention Crossover Effects

Universal Intervention Effects on Young Adolescents/Adults–Up to 14 Years Past Baseline

- Across wide-ranging types of substance use
- Improved parenting skills and family functioning
- Improved youth skills (e.g., peer resistance, social competencies)
- Improved school engagement and grades
- Decreased aggressive/destructive behaviors, conduct problems
- Decreased mental health problems (e.g., depression)
- Decreased health-risking sexual behaviors

Q: Why?

A: Programs address common R/P factors; have impacts on primary socializing environments (social networks)
Population Impact Requires Effective Intervention Plus Widespread “Community” Delivery

...A larger “piece” of evidence-based interventions (EBIs), with sustained, quality implementation on a larger scale.

Rigorously demonstrated, long-term EBI impact is very rare (Foxcroft et al., 2003).
Evolving Community-University Partnership Model

PROSPER

- Local Community Teams—Extension Agent, Public School Staff, Social Service Agency Representatives, Parent/Youth Representatives

- Prevention Coordinator Team—Extension Prevention Coordinators

- University/State-Level Team—University Researchers, Extension Program Directors
PROSPER Outcome Study

• Collaboration with PSU

• Design: RCT of 28 school districts (14 IA, 14 PA)
  – Full partnership with community teams
  – Delayed intervention

• Participants: Two cohorts of 6th grade children (≈ 6,000 students per cohort); 2nd cohort has ≈ 1,000 intensive assessment families

• Multimethod, multi-informant measurement (now at 9th wave of data collection–post high school)

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Illustrative Findings: Long-term Impact on Illicit Substance Use Index*

Reduced Growth in Use Through 6½ Years Past Baseline

PROSPER intervention vs. control difference in growth of use is statistically significant, as are differences at multiple time points, including 11th and 12th grades.


* Sum of six lifetime illicit use measures (methamphetamines, Ecstasy, inhalants, Vicodin, prescription drug misuse overall, other illicit drug use).
Key PROSPER Partnership Randomized Control Trial Findings from Published Articles

- **Effective mobilization** of community teams
- Community **teams sustained programming** efforts for ten years
- Community teams achieved **high recruitment rates** for family program participation, compared to traditional approaches
- All programs **implemented with high levels of quality**
- Positive effects for **strengthening family relationships, parenting, and youth skill outcomes**
- Youth score significantly lower on a **range of problem behavior outcomes** (both substance misuse and conduct problems)
- Reductions in **negative peer influences** indicated by social network analyses
- Indications that it is **more cost efficient** than regular programming; also, that it is **cost effective and cost beneficial**

Overall, conduct priority research re consumer/stakeholder demand, distribution, and sustainable funding within State Prevention Systems.
Ongoing Scale Up of PROSPER Model Implementation

- PROSPER Network Team formed to support Model adoption in new states
  - Developing funding models
  - Developing systems for military family adaptations
Blending Military and Civilian Support Systems for Effective EBI Delivery: Proposed Adaptation and RCT

PROSPER Model Incorporating Military Stakeholders

North Carolina PROSPER Partnership for Military Families
PROSPER Partnership Network Team
PPSI-Based Project Investigators & Technical Assistance Providers

Local Teams
Military-Connected Team Leader, Military School Liaison Officer, School System’s Military Family Counselor, and representatives from Family Readiness Groups/Family Assistance Centers

Prevention Coordinator Team
Military-related Personnel and Extension-based Staff

State Project Management Team
NC National Guard State Youth Coordinator, NC Project Investigators, RTI Field Coordinator, and Extension System Coordinator
The PROSPER Partnership Group

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www.prosper.ppssi.iastate.edu
www.ppssi.iastate.edu
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