Community Expertise of Evidence-Based Prevention Programming

Max Crowley & Mark Greenberg

Abstract

We evaluated whether local stakeholder involvement in community teams that implement evidence-based programs would lead team members to show improved knowledge of how to best select, implement and evaluate prevention programming.

Introduction

- Prevention scientists have demonstrated that efficacious interventions can reduce risk and promote positive development in youth (Spoth, Kavanagh, & Dishion, 2002).
- Building the knowledge and expertise of local stakeholders is considered an important benchmark for implementing and sustaining evidence-based programs (Wandersman et al., 2008; Livet & Wandersman, 2005).
- Projects that aid communities in the adoption and implementation of programming (i.e., prevention systems), have demonstrated the value of building capacity as a means to support program dissemination (Hawkins, et al., 2009).
- There is a paucity of evidence that technical assistance leads local stakeholders to improved knowledge regarding the selection, implementation, and evaluation of evidence-based programs (e.g., Brown, Hawkins, Arthur, Briney & Abbott, 2007).

Methods

- This study utilized open-ended questions to evaluate programming knowledge of community leaders (n=422) participating in a randomized control trial of a prevention system known as the PROSPER project.
- The PROSPER project cultivates sustainable partnerships between communities, schools and universities to promote implementation of evidence-based programs.
- PROSPER community leaders (n=271) received coaching, training, and technical assistance (Spoth, et al, 2004), activities expected to improve innovation-specific capacity (Wandersman et al., 2008). Control community leaders (n=151) received no additional support.
- Community leaders were interviewed annually to determine their knowledge regarding the selection, implementation and evaluation of prevention programs. A dichotomous coding procedure identified responses that demonstrated the highest levels of programming expertise within different prevention programming knowledge domains (Table 1).
- Knowledge of program sources, standards of evidence and program evaluation were assessed from pretest to year five and fidelity assurance from pretest to year seven.

Analysis & Results

- Logistic multilevel models were used to examine differences in programming expertise between PROSPER and control communities (i.e., Condition) (Figures 1-4).
- Analyses were conducted using PROC GLIMMIX procedures in SAS (SAS Institute, 2004). These procedures were used to analyze a three-level nested model with individuals nested within communities and time points nested within individuals.
- Community leaders involved in PROSPER were significantly more knowledgeable about the standards of evidence, fidelity assurance and program evaluation for effective prevention programming. PROSPER and control communities did not differ in expertise of prevention program authorities (Table 2).

Table: 1 *Domains of Programming Knowledge Measured*

Knowledge Domain	*Highest Level of Knowledge*
Prevention Program Sources	*Able to nominate a high quality prevention specific place to research effective prevention programs*
Standards of Evidence	*Able to provide a specific indicator of program efficacy of effectiveness*
Fidelity Assurance	*Able to describe a specific method of assuring program fidelity*
Program Evaluation	*Able to provide a specific, quality method for evaluating program effectiveness*

Table 2: Community Leader Programming Expertise by Condition

Knowledge Domain		DF	DF	*F*-value	*P*-value
Program Sources	Condition	1	399	4.64	0.0318
	Time	3	689	2.48	0.0600
	Condition*Time	3	689	1.48	0.2184
Standards of Evidence	Condition	1	348	15.55	<.0001
	Time	3	707	2.39	0.0674
	Condition*Time	3	707	3.12	0.0254
Fidelity Assurance	Condition	1	396	36.50	<.0001
	Time	5	656	2.31	0.0424
	Condition*Time	5	656	5.65	<.0001
Program Evaluation	Condition	1	359	10.93	<.0010
	Time	3	731	5.05	<.0018
	Condition*Time	3	731	2.60	0.0508

Figure 1. Knowledge of Prevention Program Sources

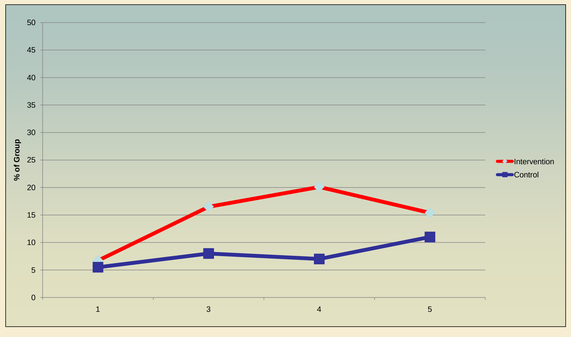


Figure 2. Knowledge of Programming Standards of Evidence

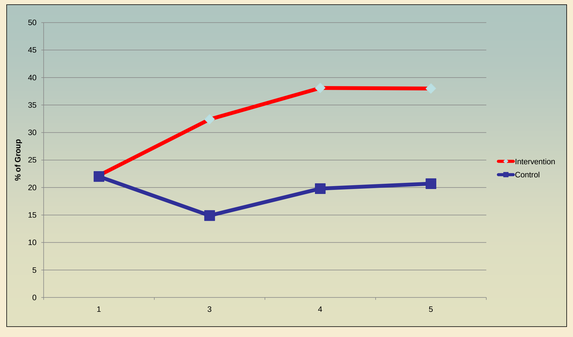


Figure 3. Knowledge of Fidelity Assurance

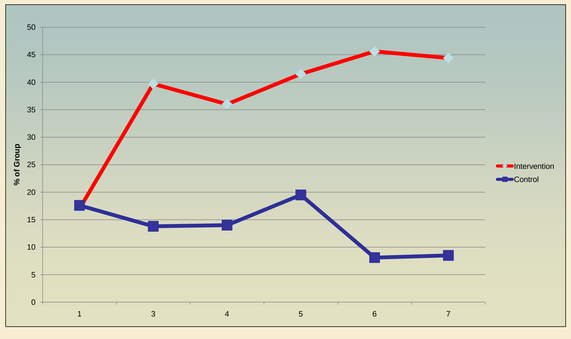
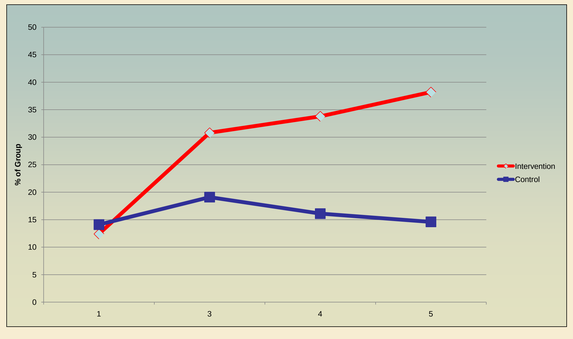


Figure 4. Knowledge of Program Evaluation



Discussion

- Knowledge of selection, implementation and evaluation of evidence-based prevention programs increased among PROSPER community leaders across time.
- Specifically, a greater proportion of PROSPER community leaders demonstrated expert knowledge of programming standards of evidence (17.6%), fidelity assurance (35.9%) and evaluation (23.6%) then did community leaders in the control condition during the final wave of measurement.
- PROSPER team members did not significantly differ in their knowledge of prevention program sources (e.g., *CSAP*, *SAMHSA*, *Blueprints*) compared to controls.
- PROSPER community leaders were provided a menu of evidence-based prevention programs to select from. Consequently, community leaders were not required to search for quality sources of prevention programming.
- These results indicate that the PROSPER project is effective in cultivating prevention programming expertise.
- Additionally, these findings support growing evidence that demonstrates the value of robust technical assistance for successful program dissemination.
- It would be valuable to further explore the differential gains in knowledge of various subgroups (e.g., extension educators, school officials, parents), which take part in the PROSPER project.

References

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