Adaptation and Fidelity: A Closer Look:



National Center for Mental Health Promotion and Youth Violence Prevention Wayne M. Harding, Ed.M., Ph.D. Director of Projects Social Science Research & Evaluation, Inc. Burlington, Massachusetts 01803 781-273-4206 wharding@ ssre.org



Topics

- Define fidelity and adaptation.
- Advantages & disadvantages of replication vs. adaptation.
- Why is this an issue (why not just replicate)?
- Guidelines for adaptation.
- Monitoring fidelity across multiple program sites (e.g., in a state).





Evidence-based programs to prevent substance abuse.

A prevention activity is judged to be evidence-based if "good" research (research shown to be rigorous according to a set of defined criteria) demonstrates that:

- 1. the activity produced the expected positive results, and
- 2. the results can be attributed to the activity rather than to other factors.



Why Is Understanding Fidelity Important?

- Information about fidelity is essential to interpreting outcomes.
- Fidelity reveals information about program feasibility. (Dusenbury et al. 2003)



Fidelity – Did you keep it the same?

"The degree of fit between the developer-defined components of a program and its actual implementation in a given organizational or community setting." (Backer, 2002)



Fidelity – A Complication

There are two types:

- 1. fidelity to the original program
- 2. fidelity to the proposed/planned program.

(Cummins et al., 2002)



Fidelity – A Complication (continued)

• With replications (or implementations of innovative programs), track fidelity to the original program



• With already adapted programs, document modifications to the original program prior to implementation, and then track adaptations relative to the modified program.



Adaptation – How did you change it?

- "Deliberate or accidental modification of the program." (Backer, 2002)
- Types: additions, deletions, or modifications to the content, delivery method, target population, setting, or delivery agent. (Formica and Harding, 2001)



Adaptation – Complications

- Adaptation may continue. (Formica and Harding, 2001)
- Adaptations to the evaluation are potentially as significant as adaptations to the program. (Formica and Harding, 2001)



Some Key Features of Comprehensive Fidelity Assessment

- Assess fidelity to original or model program and to proposed (adapted) program.
- Assess fidelity at intervals.
- Assess all aspects of the program (e.g., content, delivery methods, target population, setting delivery agent).
- Assess adaptations to evaluation methods (in both original and proposed program).
- Assess rationale for adaptation.



Opposing Viewpoints

"Fidelity is related to effectiveness and any bargaining away of fidelity will most likely decrease program effectiveness. There is very little experimental evidence on the impact of local enhancements or modifications on the effectiveness of programs." (Elliott & Mihalic, 2004)



Opposing Viewpoints

"Adaptation may render a program more responsive to a particular target population. Adaptation could increase a program's cultural sensitivity and its fit within a new implementation setting... cultural adaptation, for example, has been found necessary to engage the interest of prevention program participants." (Schinke, Brounstein, & Gardner, 2002)



The Great Compromise

"Attention to BOTH fidelity and adaptation is essential for successful implementation of science-based prevention programs." (Backer, 2002)



Why is this an issue?

- Replication can be hard.
- Limited supply of evidence-based programs makes adaptation likely.



Adaptation Happens

- Between 23% and 81% of program activities may be omitted during implementation. (Durlak, 1998)
- Only 19% of schools implementing research-based curricula with fidelity. (Hallfors and Godette, 2002)
- Only about 75% of the students received 60% or more of the Life Skills Training Program. (Botvin et al., 1995)



Adaptation Happens Under Restricted Conditions: MassCALL

- The RFP, site visits, evaluation plans, and biannual reports all required information about adaptations.
- Approval for adaptation required by MassCALL.
- MassCALL adopted conservative position regarding adaptations.



Adaptation Happens: MassCALL

Types and Frequency of Adaptations among MassCALL Sub-recipients (Formica and Harding, 2001)

	Types of Adaptations				
Program Types	Content	Delivery Methods	Target Pop.	Setting	Delivery Agent
Mentoring (4)	3	3	3	0	4
Family-Based (5)	3	12	2	1	1
Life Skills Programs (7)	6	11	3	4	3
Other School/Community Programs (3)	5	5	2	1	5
Peer Leadership (2)	1	5	0	0	0
Total (21)	18	36	10	6	13



Adaptation Happens: MassCALL

- All 21 program sites made one or more program adaptations.
- Adaptations occurred for all program types.
- The adaptations applied to all aspects of the programs (content, delivery methods, target population, setting, delivery agent).
- Conservatively, 83 adaptations were made.

(Formica and Harding, 2001)



Adaptation Happens: MassCALL

- **Content:** Strengthening Families Program adapted for Cambodian population.
- **Delivery Methods:** Families in Action delivered to combined vs.separate groups of parents and children.
- **Target Population:** SMART Moves, recipients changed from 14-17 to 12-14.
- **Setting:** Life Skills Training implemented in community center after school versus in school.
- **Delivery Agent:** For Across Ages, age of mentors changed from over 55 years to 25 and over.



Guideline 1:

Select Programs With the Best Initial Fit

In order to minimize adaptation, select programs with the best initial fit to local needs and conditions. (Goddard and Harding, 2002)

- 1. resources (e.g., time, money)
- 2. target population (e.g.,does the target population have a positive history with the organization?)
- 3. organizational climate (e.g., is there buy-in of key staff?)
- 4. community climate (e.g., is the community willing to engage in another program?)
- 5. evaluability (e.g., does the practitioner have the tools and skills needed to evaluate the program?)
- 6.future sustainability (e.g., likelihood that the program can be sustained once "seed" money ends?)



Distribution of Evidence-Based Programs

	Number	%
LifeSkills Training	91	48%
Project ALERT	79	41%
Second Step	77	40%
Project Towards No Tobacco Use (TNT)	31	16%
Preparing for Drug Free Years	19	10%
DARE to be you	17	9%
Families and Schools Together (FAST)	14	7%
Strengthening Families Program (SFP)	13	7%
Reconnecting Youth	12	6%
Too Good for Drugs	11	6%
All Stars	10	5%
Aggressors, Victims, and Bystanders	9	5%
Students Managing Anger and Resolution Together (SMART) Team	8	4%
Project SUCCESS	7	4%
Teenage Health Teaching Modules	7	4%
Lion's Quest for Adolescence	6	3%
Michigan Model Curriculum	6	3%
Project ACHIEVE	6	3%
Project Towards No Drug Abuse (TND)	6	3%
Olweus Bullying Prevention	5	3%
PeaceBuilders	5	3%
Project Northland	5	3%
Residential Student Assistance Program	5	3%

Partial data from a 2003 national survey of 191 middle school prevention coordinators. The list includes only those programs defined as science-based by either USED or CSAP.



Select Programs With the Largest Effect Size

Guideline 2:

In general, a program with a large effect size is less likely to have the relevant outcome reduced by an adaptation than a similar program with a small effect size.



Guideline 3: Change Capacity Before Program

It may be easier to change the program, but changing local capacity to deliver it as it was designed is a safer choice. (Goddard and Harding, 2002)



Guideline 4: Consult With The Program Developer

Consult with the program developer to determine what experience and/or advice they have about adapting the program to a particular setting and circumstances. (Backer, 2002)



National Center for Mental Health Promotion and Youth Violence Prevention

Guideline 5: **Retain Core Components**

There is a greater likelihood of effectiveness when a program retains the core component of the original intervention.

- We still know little about the core components of specific programs.
- Look to what developers identify as core components or "implementation essentials."



Excerpt for Across Ages from SAMHSA Model Programs Website

"To replicate with fidelity, programs must:

- Use all program components
- Have mentors who are 55 years or older
- Implement State or agency approved screening and training of mentors that includes 8 to 10 hours of preservice training and monthly inservice meetings
- Provide training and orientation for all participants
- Provide stipends or reimbursement to mentors
- Vigilantly monitor the mentor-youth matches
- Prepare written agreements between collaborating organizations
- Staff the program adequately (i.e., a minimum of one full-time and one part-time staff person for 30 youth and 15 to 20 mentors)."



Guideline 6:

Be Consistent with Science-Based Principles

 There is a greater likelihood of success if an adaptation does not violate a science-based prevention principle. (Brounstein, Zweig, & Gardner, 1998).

• Example of prevention principle: peer leaders are an effective prevention delivery method.



Guideline 7: Add Rather Than Subtract

It is safer to add to a program than to modify or to subtract from it. (Brounstein, 2003)



Toolkit for Assessing Fidelity and Adaptation

- Applies to "any" program.
- Designed to assess fidelity across programs.
- Treats adaptation as ongoing.
- Distinguishes between fidelity to original program and fidelity to proposed (already adapted) program.



Toolkit for Assessing Fidelity and Adaptation

- Addresses range in types of adaptations (content, duration, delivery method, target population, setting, delivery agent, etc.).
- Tracks evaluation changes.
- Collects data about reasons for adaptations Designed to assess fidelity across programs.



References

Backer, T.E. (2002). Finding the balance: Program fidelity and adaptation in substance Abuse prevention: A state-of-the art review. Rockville, MD: Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Substance Abuse Prevention (CSAP).

Botvin, G.J., Baker, E., Dusenbury, L., Botvin, E.M., and Diaz, T. (1995). Long-term followup results of a randomized drug abuse prevention trial in a white middle-class population. *Journal of the American Medical Association*, 273: 1106-1112.

Brounstein, P. (2003) The Continuing Adventures of Fidelity and Adaptation. Presentation at "Implementing Science-based Prevention Programs Effectively: A forum on Fidelity and Adaptation," satellite broadcast sponsored by the Northeast CAPT, Knoxville, TN, April 16.

Brounstein, P, Zweig, and Gardner, S. (1998) Science-Based practices in substance abuse prevention: a guide. Rockville, MD: Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Substance Abuse Prevention (CSAP).

Cummins, M., Goddard, C., Formica, S, Cohen, D., and Harding, W. (2002) An Approach to Assessing the Fidelity of Prevention Programs. Paper presented at the 10th Annual Meeting of the Society for Prevention Research, Effectiveness and Dissemination in Prevention Research, Seattle, Washington, May 31.



References

Durlack, J.A. (1998) Why Program Implementation Is Important. *Journal of Prevention & Intervention in the Community*. 17(2): 5-18.

Dusenbury, L., Brannigan, R., Falco, M., Hansen, B., (2003) A review of research on fidelity of implementation: Implications for drug abuse prevention in school settings. *Health Education Research*. 18(2): 237-256.

Elliot, D.S., and Mihalic, S. (2004) Issues in disseminating and replicating effective prevention programs. *Preventon Science*. 5 (1): 47-53.

Formica, S. and Harding, W. M. (2001). Documentation of adaptations to science-based programs implemented by MassCALL sub-recipient communities. Massachusetts Collaboration for Action, Leadership, & Learning (MassCALL), Massachusetts Department of Public Health, Bureau of Substance Abuse Services, Boston, MA.

Goddard C. and Harding W. (2002) Selecting Appropriate Prevention Programs Through Feasibility Assessment, Training Manual. Education Development Center, Newton, MA.

Hallfors, D. and Godette, D. (2002) Will the "Principles of Effectiveness" improve prevention practice? Early findings from a diffusion study. *Health Education Research*. 17(4): 461-470.



References

Kumpfer, K., Alvarado, R., Smith, P., Bellamy, N. (2004) Cultural Sensitivity and Adaptation in Family-Based Prevention Interventions, *Prevention Science*. 3(3): 241-246.

Schinke,S., Brounstein, P., and Gardner, S. (2002) Science-Based Prevention programs and Principles, 2002. DHHS Pub. No. (SMA0 03-3764. Rockville, MD: Center for Substance Abuse Prevention, Substance Abuse and Mental Health Administration. (http://modelprograms.samhsa.gov)