

Improving Methods for Research on Health Program Sustainability



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Implementation

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Outline of Topics for Session

- I. Introduction: Setting context for discussion
- II. What dependent variables are used in research on “sustainability”?
- III. What factors are related to sustaining interventions (independent variables) ?
- IV. Spread: dissemination and sustainability of effective interventions



I. What is “Sustainability?”

- Definitions differ by perspective - in general, it's what happens to a program or intervention *after* external funding ends
- What is a “program”? - “A set of resources and activities directed toward one or more common goals”

■ Newcomer, et al., 1994



Other Types of “Sustainability”

- Economic sustainability - whether an economic development program can maintain itself; often used in international context
- Ecological sustainability - maintaining the environment in a steady state; not environmentally degrading
- Organizational sustainability – does the organization itself continue to exist?
- Grant sustainability – can we continue to get grants?
- Not the focus of this session!



Why is Sustainability Important to Researchers?

- Because it's important to funders!
- Keeping "good will" of community partners, willingness to participate in future intervention research
- Ethics of partnerships with community organizations, after intervention research
- Sustainability is itself an important research topic; focus moves from "efficacy" to "effectiveness" in context



Context for Sustainability Research: Program Life Cycles

- Programs develop over time, thru stages:
 - Problem identification
 - Solution (program) specification - how much is enough to address the problem?
 - Implementation – full or partial?
 - Sustained use or discontinued?
- Sustainability is affected by all earlier stages



Scheirer: Studies Evaluating Sustainability in the Health Field

- Reviewed 19 empirical studies in 2003-4, during & after working at RWJF
 - Published 2005 in *American Journal of Evaluation*
 - Focus: What evidence exists about sustainability and what factors influence health programs sustainability?
- 2 prior studies of intervention maintenance:
 - For breast & cervical cancer screening in Maryland,
 - National survey of implementation & maintenance of fluoride mouth rinse in schools
- 2006-2010: Conducting annual web-based surveys of NJHI projects closed out 1990 to 2005



Dearing : Sustainability in the Context of Diffusion Research

- WKKF cluster evaluation
- U.S. EPA studies
- Theory pieces about adaptation, implementation
 - Strategies to reach sustainability
- Current NHLBI study
- Kaiser work on rapid cycle improvement



II -What is to be Sustained?

Four Types of Dependent Variables:

A. Sustaining *benefits* or outcomes for consumers

- Could include persistence of an outcome/effect

B. Sustaining specific program *activities*

- This is where most previous evaluations focused

C. Sustaining enhanced community or organizational *capacity* (coalitions)

- The Carol Weiss enlightenment result

D. Sustaining *attention* to the issue or problem

- Dissemination or replication of the intervention



Discussion re Dependent Variables

- Additional concepts that should be included as dependent variables or outcomes?
- Which should have priority in research?
- How should they be measured?
- Other issues ?
 - Unintended consequences too?
 - Negative consequences too?



Other Issues in Measuring the *Extent* of Sustainability

- Timing – when to assess whether or not a project is “sustained”? Deteriorate over time?
- Is there a threshold for stating that “it” was or was not sustained?
- How much “adaptation” or change can occur, and still be the “same” program?
- Finding that a program still exists does not mean it was caused by initial funding source.

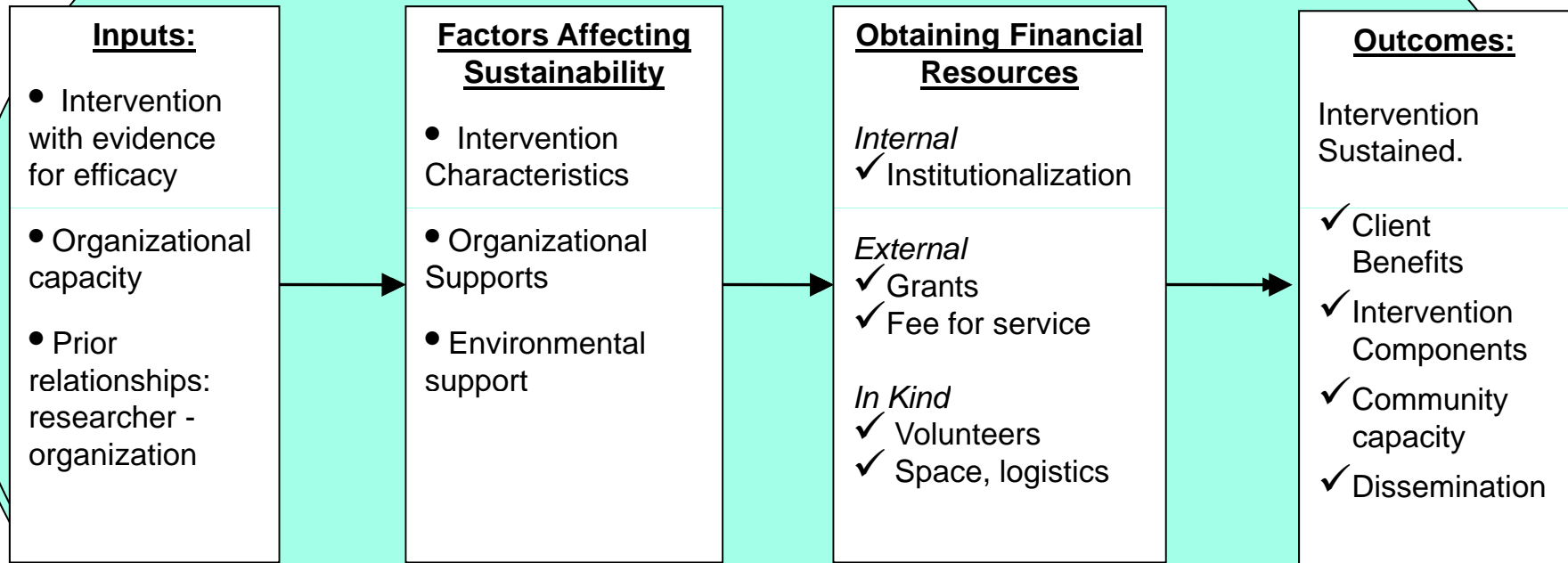
III. How to Sustain?

What Factors Influence Sustainability?



- Research reviewed looked at multiple factors as potential influences on sustainability
- No uniform set of factors studied
- At best, relational analysis done; most were retrospective data collection
- Conceptually, the independent variables in a study design

Logic Model for "Sustainability"



Policy and Financial Environment

What Influences Sustainability?

- Framework of factors coded for lit review as potential influences on sustainability:
 - Components of project design and its characteristics
 - Aspects of organizational setting
 - Aspects of community environment



Factors influencing sustainability?

A. Project design and characteristics

- ** If intervention is *modified* from its original form; intervention is flexible, adaptable
 - Supported by 12 (of 17) studies
- Uses no paid staff; uses volunteers; *low cost*
 - Supported by 5 studies
- Evaluation available & showed effectiveness
 - Supported by only 4 studies
 - Reputation for effectiveness likely more influential than results of evaluation

Factors influencing sustainability?

B. Factors in Organizational Setting

- ** Good fit between program & host agency's *mission*, objectives, and operating routines
 - Supported by 12 (of 17) studies
- ** Presence of an internal "*champion*"
 - Supported by 13 (of 17) studies
- Organization has strong existing capacity
 - Supported by 4 studies
- ** Benefits *felt* by agency &/or staff - 12 studies

Factors influencing sustainability?

C. Community Involvement & Environment

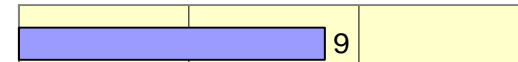
- Presence of *external* funding, type of funding
 - Supported in 9 studies
- ** Non-monetary support by *other* community organizations
 - Found helpful in 12 (of 17) studies



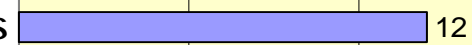
Factors Related to Program Sustainability

Aspects of Community Environment

Funding from other sources



Support from other organizations

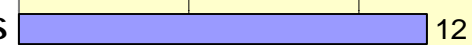


Aspects of Organizational Setting

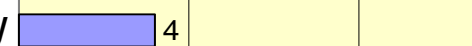
Benefits visible to staff or clients



Fit with mission and procedures



Existing organizational capacity

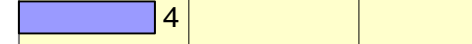


Role of program champion

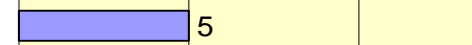


Program Design & Characteristics

Use of evaluation data



Low cost/uses volunteers



Program is modifiable at local level



0 5 10 15
Number of Studies

Others mentioned: Use of TA; planning in advance; staff & ownership changes; strong implementation.
Source: Scheirer, AJE 26 (2005) 320-347



Financial Strategies for Sustainability

1. Institutionalization = Incorporating project activities into agency budget
2. External grants or fund-raising
3. Health insurance/fee for service
4. System change - may not require additional resources





Funding

- “ Whenever anyone says it is not about the money, it *is* about the money.”
 - Attributed to H.L Menken



Assessing Influences on Sustainability: Methods in Prior Research

- Methods used by researchers for assessing these factors were not uniform:
 - A few studies identified potential factors in advance, and operationalized them in specific questions
 - Others asked respondents: “What factors helped you to sustain?”
 - Case studies provided detailed descriptions
 - Only a few built on prior studies
- I coded all into “yes – no” findings



2004 Lit Review: Methods Used (Continued)

- Number of sites or projects studied per paper:
 - Ranged from 5 to 787
- Their data collection methods:
 - Mail/telephone surveys – 11 studies
 - Case studies – 5 studies
 - Other/multiple – 8 studies
- Many used only 1 respondent per site



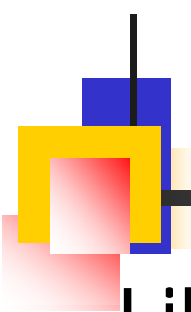
Methods Used for Sustainability Research - Con't.

- Elapsed time, after funding ended:
 - 2 years or more, or varied – 12 studies
- Method for analysis:
 - Statistical test (s) – only 8 studies
 - Frequencies or narrative only – 9 studies
- Reported any checks for data quality - 10



Discussion: Factors Related to Sustainability

- Other factors that should be included?
- Can we do prospective studies, of interventions to enhance sustainability?
- What designs should be used?
- Data collection methods?
- Timing of sustainability research?
- Is sustainability most often determined by unique local circumstances?



IV – “Spread” → Dissemination and Sustainability of Evidence-Based Programs

Likely to involve 4 major processes:

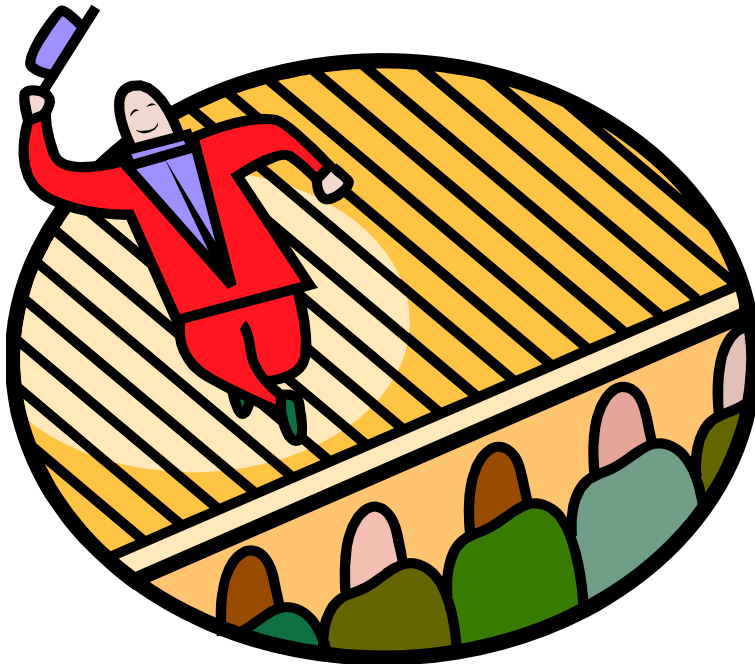
1. Dissemination on basis of demonstrations, etc.
 - Including how change agents spend time
2. Decisions to adopt/use the program
 - Program attributes, adaptability
3. Implementation processes in each adopter organization
 - Including implementation support systems
4. Sustainability
 - i.e., the active & passive rejection of the innovations



Common Factors Across Time-Ordered Stages?

- IVs seem similar for adoption, sustainability (uncertainty stages)
 - But not for implementation (routinization stage)?
- Embedded social influence important at adoption, implementation stages; sustainability too
- To what extent can initial design decisions affect sustainability?

That's All, Folks!



- Go and do good work to plan for and do research on sustainability!