Predictors of Sustainability for Community-Based Adolescent Smoking Cessation Programs

Robin Mermelstein, PhD, Amy Sporer, MS, Sherry Emery, PhD, Oksana Pugach, MPH
University of Illinois at Chicago
Institute for Health Research and Policy

&

Sue Curry, PhD
University of Iowa
College of Public Health

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Helping Young Smokers Quit is a national program supported by the Robert Wood Johnson Foundation, the National Cancer Institute and the Center for Disease Control and Prevention with direction and technical assistance provided by UIC.
Importance of Program Sustainability

- Program sustainability or survival is increasingly recognized as an important outcome of health programs.

- Substantial resources are often committed to community-based health programs, yet programs are often short-lived.

- Understanding factors that may influence program sustainability is important for improving and maintaining access to health promotion programs.
Goal of Current Study

• To examine predictors of program sustainability over a 3-year period for community-based youth smoking cessation programs
The Helping Young Smokers Quit (HYSQ) initiative is a multi-phase project that addresses the critical need to disseminate effective, developmentally appropriate cessation programs for adolescent smokers.
Helping Young Smokers Quit: Primary Aims

The Helping Young Smokers Quit initiative (HYSQ) is a three-phase project with the primary aims:

- **Phase I**: To identify and describe tobacco treatment programs available to youth across the U.S.

- **Phase II**: To evaluate smoking cessation programs tailored for youth to help understand what works.

- **Phase III**: To identify factors associated with sustainability of programs since their initial contact
Phase I: Identification of Programs

- Snowball sampling protocol implemented to identify and characterize smoking cessation programs for youth in a representative sample of 408 counties in the U.S.

- Programs identified though key informants in 4 community sectors (Health, Education, Voluntary Organizations, Tobacco Control Community)

- Once identified, program administrators screened to determine eligibility and then interviewed
Program Eligibility Criteria

• Smoking cessation must be a recognized component of treatment
• Direct services provided to youth aged 12 to 24 years
• At least half of the participants had to be in target age range
• Program in operation for at least 6 month prior to being contacted
• Program could not be part of a research initiative.
• 756 programs identified
Program Characteristics: Phase I

- Homogeneous set of program
- 91% school-based
- 73% have in-person group + adjunct format
- 89% have written facilitator guide/manual
- 88% use counselors trained in smoking cessation
- > 90% use a combination of cognitive-behavioral strategies
- 56% have enrollment that is voluntary only; 9% mandatory only
Phase III: Recontacting Programs

• Attempted to recontact all 756 eligible Phase I programs

• Conducted telephone surveys with program administrators
  – Sustainability surveys with program administrators for surviving programs
  – Discontinuation surveys with knowledgeable organizational representative of program where services no longer provided
Recontact Results

Starting Sample
N = 756

Programs Not Surveyed
N = 396
52.4%

Programs Surveyed Sustained
N = 215
28.4% of total
60% of surveyed

Programs Surveyed Discontinued
N = 144
19.0% of total
40% of surveyed
Reasons for No Survey

- 49.2% (N = 195) Unable to locate
- 27.8% (N = 110) Not able to interview/no answer
- 11.4% (N = 45) Refusals
- 11.6% (N = 46) Other
Approach

- Prospective data from Phase I program surveys with program administrator

- Data from parallel items on sustainability and discontinuation surveys from Phase III with knowledgeable program administrator
Influences on Sustainability

Organizational Alignment/Integration

Program Resources

Financial & Human Resources

Marketing, enrollment, retention

Demand

Sustainability

Local Ownership

Involvement in program selection, support & delivery

Standard Operating Procedures

Policies & Procedures for personnel who run program

Organizational support & initiative to offer program
Sustainability Factors: Organizational Support

- How much of a priority youth cessation is to community leaders
- How much youth tobacco use is a concern in community
Priority Community Leaders Place on Youth Cessation: Percent Responding “Not at all a Priority”

- Phase I: Sustained (15.5%), Discontinued (12.9%)
- Phase III: Sustained (11.1%), Discontinued (30.1%)

Legend:
- Sustained
- Discontinued
Concern in the Community for Youth Tobacco Use

Mean Level of Concern (1-10)

<table>
<thead>
<tr>
<th>Phase</th>
<th>Sustained</th>
<th>Discontinued</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase I</td>
<td>6.4</td>
<td>6.5</td>
</tr>
<tr>
<td>Phase III</td>
<td>5.6</td>
<td>5.4</td>
</tr>
</tbody>
</table>

- **Sustained**
- **Discontinued**
Sustainability Factors: 
Local Ownership of Program

• How program materials are developed
• Does program conduct evaluation
• Were there any modifications to the program
• What was the program offered in response to
Sustainability Factors: Local Ownership of Program

• Both sustained and discontinued programs use primarily externally developed programs
  – 86-90% primarily externally developed for both at both time points

• High proportion of both sustained and discontinued programs conduct evaluations
  – 76-83% for both program status at both time points
Ownership: Modification of Program Format

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<thead>
<tr>
<th>Phase</th>
<th>Sustained</th>
<th>Discontinued</th>
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</thead>
<tbody>
<tr>
<td>Phase I</td>
<td>22.5</td>
<td>22.2</td>
</tr>
<tr>
<td>Phase III</td>
<td>21.3</td>
<td>41.2</td>
</tr>
</tbody>
</table>
Ownership: Use of Self-Help Manuals

% use self-help manual adjunct

Phase I

- Sustained: 44.4%
- Discontinued: 50.4%

Phase III

- Sustained: 47.5%
- Discontinued: 64%

Legend:
- Sustained
- Discontinued
**Ownership: Primary Reason for Offering Program (Phase I)**

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<thead>
<tr>
<th>Primary Reason</th>
<th>Sustained</th>
<th>Discontinued</th>
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<tbody>
<tr>
<td>Initiative of program leadership</td>
<td>42.0%</td>
<td>40.5%</td>
</tr>
<tr>
<td>Response to Health Dept of Dept of Ed</td>
<td>20.2%</td>
<td>22.4%</td>
</tr>
<tr>
<td>School or teacher demand</td>
<td>8.5%</td>
<td>10.3%</td>
</tr>
<tr>
<td>Legislation with penalty</td>
<td>6.4%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Youth demand</td>
<td>2.7%</td>
<td>2.6%</td>
</tr>
</tbody>
</table>
Sustainability Factors: Resources

• Perceived adequacy of funding
  – Equivalent at Phase I for both sustained and discontinued programs
    • Mean of 3.6 on 1-5 scale

• Number of paid and volunteer staff
  – Equivalent at Phase I for both sustained and discontinued programs
    • Mean of 1.0 paid FTE; 0.3 volunteer

• Sources of funding
  – At both Phase I and Phase II, discontinued programs more likely to rely on state and local government funding
    • Discontinued programs – 70% rely on state and local
    • Sustained programs – approximately 60% rely on state and local
Sustainability Factors:
Standard Operating Procedures

• Presence of written facilitator guide
  – Equivalent for both sustained and discontinued programs at both Phase I and Phase III
    • 87-97% use written guide

• Staff trained in smoking cessation counseling
  – At Phase I, sustained programs more likely to have staff trained (94.5% vs 87%); but equivalent by Phase III (91% and 93%)
Sustainability Factors: Demand

- Number of youth in program
- Program completion rates
  - Equivalent across both sustained and discontinued and at both Phases (68-74%)
- Proportion of mandatory and voluntary participants
Demand: Number Youth in Program Past 12 months

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</thead>
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<tr>
<td>Phase I</td>
<td>66.3</td>
<td>34.3</td>
</tr>
<tr>
<td>Phase III</td>
<td>106.6</td>
<td>28.7</td>
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Demand: Voluntary and Mandatory Enrollment (percent that include both)

Discontinued programs more likely to have voluntary only at Phase I and III.
Sustainability Factors: Program

• Program setting
  – Equivalent for both sustained and discontinued programs
    • Both remain overwhelmingly in-person group and school-based

• Length of time in operation
  – Sustained programs in operation for significantly longer
    • Sustained programs mean = 9.9 years (SD = 4.6)
    • Discontinued programs mean = 5.4 years (SD = 3.5)
Summary

• Few prospective predictors of program sustainability
  – May be a function in part of program homogeneity at Phase I

• Across a variety of domains, sustained and discontinued programs appear equivalent at Phase I
  – Primary differentiated factor is Demand
    • Both numbers and distribution of mandatory and voluntary participants

• However, by Phase III, some differences emerge
  – Community support for program
  – Source of financial support
  – Modifications to program
Conclusions

- Important to consider factors from multiple levels of influence in predicting sustainability
  - But demand may be most central
  - May also be more idiosyncratic profiles of sustained programs
    - Qualitative work

- Sustainability in itself not always desirable
  - Not all programs should be sustained
  - Natural lifespan of problems and programs