Agency and County Characteristics Associated with Sustainability of an Evidence-Based Parenting Program

DESIREE W. MURRAY¹, WILL ALDRIDGE¹, ², RON PRINZ²,³
¹FPG CHILD DEVELOPMENT INSTITUTE, UNC-CHAPEL HILL
²NATIONAL PREVENTION SCIENCE COALITION TO IMPROVE LIVES
³PARENTING & FAMILY RESEARCH CENTER, UNIVERSITY OF SOUTH CAROLINA

24TH ANNUAL MEETING OF THE SOCIETY FOR PREVENTION RESEARCH
SAN FRANCISCO, CA
Importance of Sustainability Research

- Funders are increasingly concerned about the sustainability of programs they initiate
  - Up to 40% of new programs may not sustain
  - Partial sustainability more common than full program continuation
- Factors and processes underlying sustainability are not well-understood
  - Research methods are often descriptive and not well-grounded in implementation theory

Savoya & Spiro, 2011; Scheirer 2012; Stirman, 2012
Overview of Sustainability Factors

- **Innovation (Program)**
  - Fit, flexibility, effectiveness, ability to maintain fidelity

- **Organizational Context**
  - Climate, culture, leadership, setting characteristics, system policies

- **Capacity**
  - Internal: Champions, resources, workforce
  - External: Funding, stakeholder and community involvement

- **Processes**
  - Engagement, alignment, integration, training, evaluation, partnerships, ongoing support
What is currently known about Triple P sustainability?

- Sustained practitioner use predicted by:
  - Practitioner perceived benefit
  - Fit with duties
  - Post-training supervision/consultation

Shapiro, Prinz et al., 2012
Study Goals

- Examine organizational factors, agency capacity, and processes associated with continuation of a widely used parenting program.
- Utilize the Active Implementation Framework to predict and interpret findings (e.g., Fixsen et al., 2013; Metz & Bartley, 2012).
- Inform technical assistance around implementation for new and existing agencies across NC.
The Innovation (Program)

- Triple P (Positive Parenting Program)
  - Evidence-based and widely used
  - Public health approach
  - System of interventions with increasing intensity for children and youth of different ages and needs
  - Implementation strengths associated with the program
Context of the Study

- **Triple P implementation evaluation (TPIE) study in two NC counties**
  - Level 2/3 Basic Birth-12 or Teen most commonly adopted
  - Initial funding provided through DPH as part of a statewide roll-out
  - Counties selected for interested and responsive implementation support teams
  - 52 agencies followed prospectively across two years
    - Analyzed data from 39 that were actively implementing > 1 year
Research Questions

- What agency-level capacity and organizational factors predict continuation 1-3 years after initiation?

- What is the pattern of continuation across counties and what county-level factors may be associated with differences?
Sample

**County 1**
Population: **192,103**
- Estimate **50,331** under age 18
- Mix of urban and rural settings
- Triple P Coalition established 2012
  - Adopted 11 Triple P interventions
- 26 agencies engaged
- 123 practitioners trained
- 19/26 agencies with data analyzed

**County 2**
Population: **1,012,539**
- Estimate **249,085** under age 18
- Large metropolitan area
- Triple P Coalition established 2013
  - Adopted 12 Triple P interventions
- 26 agencies engaged
- 106 practitioners trained
- 20/26 agencies with data analyzed

Range of agency types with a diversity of funding streams across counties:
- Social Services, School, Mental Health, Faith-based, Health Care
Methods/Approach

- Semi-structured group facilitated interviews assessing implementation capacity and best practice in implementation
  - Conducted every 6 months (T2-T4) with agency leadership and implementation coordinator/team

- Online practitioner survey of “climate” for Triple P implementation at their agency

- Data used from last available time point for each agency

Facilitated group self-assessments

0 ----------------- 1 ----------------- 2
Not in place  Partially in Place  Fully in Place
Measures

**County Capacity Assessment for the Triple P System of Interventions (CCA-TP)**

**Implementation Drivers Assessment for Agencies Implementing Triple P Interventions (IDA-TP)**

- Agency Implementation Capacity ($\alpha = .83$)
- Professional Development Supports ($\alpha = .80$)
- Organizational and Systems Practices ($\alpha = .84$)

**Implementation Climate Scale**

- 7 item Likert scale adapted from Klein et al., 2001 ($\alpha = .87$)

*Based on similar assessments used in prior TA studies, e.g. Blase, Van Dyke, Duda, & Fixsen, 2011; Blase, Van Dyke, & Fixsen, 2013; Ogden, Bjørnebekk, Kjøbli, Patras, Christiansen, Taraldsen, et al., 2012; Van Dyke, Blase, Sims, & Fixsen, 2013*
### Agency Continuation & Active Practitioners

**Overall continuation:** 74% agencies, 74% practitioners

<table>
<thead>
<tr>
<th>Time</th>
<th>County 1</th>
<th>County 2</th>
<th>County 1</th>
<th>County 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spring 2014</strong> (Time 1)</td>
<td>11 Active</td>
<td>10 Active</td>
<td>89% (42 of 47)</td>
<td>95% (36 of 38)</td>
</tr>
<tr>
<td><strong>Fall 2014</strong> (Time 2)</td>
<td>18 Active</td>
<td>20 Active</td>
<td>86% (72 of 84)</td>
<td>79% (50 of 63)</td>
</tr>
<tr>
<td><strong>Spring 2015</strong> (Time 3)</td>
<td>19 Active</td>
<td>15 Active 5 Inactive</td>
<td>84% (71 of 85)</td>
<td>66% (43 of 65)</td>
</tr>
<tr>
<td><strong>Fall 2015</strong> (Time 4)</td>
<td>23 Active 3 Inactive</td>
<td>18 Active 8 Inactive</td>
<td>78% (96 of 123)</td>
<td>70% (74 of 106)</td>
</tr>
</tbody>
</table>
Active vs. Inactive Agencies

# Trained Practitioners per Agency

Active: 3.96
Inactive: 1.27

Odds Ratio: 9.8

$t = 4.35, p = .000$
Active vs. Inactive Agencies

Low Climate
(<3 on 1-5 scale)

14.3%
Active

44.4%
Inactive

\[ X^2 = 3.66, \ p = .056 \]

Odds Ratio 4.8
Active vs. Inactive Agencies

Agency Implementation Capacity
(Scored 0-2)

Active: 1.45

Inactive: 1.04

\[ t = 3.58, \ p = .001 \]
Active vs. Inactive Agencies

Professional Development Supports (0-2)

<table>
<thead>
<tr>
<th>ACTIVE</th>
<th>INACTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.54</td>
<td>1.14</td>
</tr>
</tbody>
</table>

$t = 4.01, p = .000$
Active vs. Inactive Agencies

Organizational and Systems Practices (0-2)

Active: 1.14  
Inactive: 0.85  

$t = 1.98, p = .056$
Active vs. Inactive Agencies

Sustainability Plans (0-2)

Active: 1.48

Inactive: 0.21

$t = 6.16, p = .000$
County Characteristics that may be related to Agency Continuation

<table>
<thead>
<tr>
<th></th>
<th>County 1</th>
<th>County 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grant Funding</td>
<td>$50,089/agency</td>
<td>$16,961/agency</td>
</tr>
<tr>
<td>Strength of County Implement. Team</td>
<td>92%</td>
<td>78%</td>
</tr>
<tr>
<td>Ave. Practitioners per Agency</td>
<td>4.21 + 4</td>
<td>2.25 + 2</td>
</tr>
<tr>
<td>Professional Dev. Support (0-2 scale)</td>
<td>1.57</td>
<td>1.30</td>
</tr>
</tbody>
</table>
Conclusions

- Continuation is likely related to factors at multiple levels which are related and interact in complex ways
  - Funding matters, but isn’t the whole story

- Several aspects of the Active Implementation Frameworks (AIFs) seem important for continuation
  - Leadership and implementation teams
  - Professional Development Supports
  - Organizational and Systems Practices (although less predictive)

- Implementation teams: Key leverage point?
Strengths and Limitations

Strengths
- Use of theoretical framework
- Multiple Informant assessments with psychometric support
- Prospective Evaluation

Limitations
- Small sample size
- Examination of one program in only 2 counties with many differences
Recommendations for TA

- Support strong leadership and implementation teams
- Recruit well and invest in training and coaching practitioners
- Ensure more than 1 practitioner is trained at each agency
- Encourage planning for sustainability from the beginning of program implementation
Recommendations for Future Research

- **Much more work needed on understanding sustainability**
  - Need to develop theoretical models of sustainability
  - Develop consensus on definition of sustainability
  - Examine participant outcomes in relation to sustainability

- **Questions to address:**
  - What are the critical malleable factors that impact multiple predictors of sustainability?
  - What level of implementation supports is needed for successful continuation (as well as delivery with fidelity)?
Acknowledgements

- Colleagues
  - Will Aldridge (PI), Ron Prinz, Laura Kuhn
- Partners
  - Mecklenburg Health Dept. and Cabarrus Health Alliance
  - 52 participating agencies
- Funding
  - Duke Endowment

For more information:
Contact Desiree W Murray
Desiree.murray@unc.edu