Home-Based Parent-Child Interaction Therapy (PCIT): An Empirical and Clinical Perspective

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Delaware’s Division of Prevention and Behavioral Health Services
Bridging the Gap

- Efficacy $\rightarrow$ Effectiveness

- Transportability of EBT in “real world” settings is needed

- Many PCIT studies are laboratory/clinic based

- Home-Based mental health programs more prevalent

- Home-Based PCIT is happening—need to strengthen the research base
Advantages

- Ecological Validity: Observing behaviors in their “natural” environment versus a more “artificial” setting

- Implementation: Applying skills in the home-setting versus discussing them in the clinic (e.g., timeout implementation)
  - Coaching opportunities to generalize skills

- Rapport building

- Lower attrition rates?
Challenges

- **Environmental Control**
  - Anticipation: “House Tour”
  - Choosing play areas/times carefully
- **In-Room Coding/Coaching**
  - Bug-in-the-ear?
  - Ignoring child advances
  - Written communication
- **Distractions**
  - Visitor policy
  - Problem solve around siblings

- **Resources**
  - PCIT Traveling Kit
Empirical Perspective
Home-Based Research Studies

Study #1 (Ware et al):  
Single-subject design across 3 children with ODD

Study #2 (Masse et al):  
Single-subject design across 3 children with PDD and  
Significant behavioral challenges
Caregiver Positive Behavior: Study #1

Alex

Noah

Tami
Caregiver Positive Behavior: Study #2

Kenneth

Adam

Christopher
ECBI Intensity Score: Study #1

Alex

Noah

Tami
ECBI Intensity Score: Study #2

Kenneth

Adam

Christopher
ECBI Problem Score: Study #1

Alex

Noah

Tami
## Comparison to previous studies: ECBI Intensity

<table>
<thead>
<tr>
<th>Study</th>
<th>ECBI Pre M (SD)</th>
<th>ECBI Post M (SD)</th>
<th>ECBI FU M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ware et al., 2006</td>
<td>157.67 (34.82)</td>
<td>89.33 (12.90)</td>
<td>71.67 (8.14)</td>
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<tr>
<td>Masse et al. (In Press)</td>
<td>163.5 (25.2)</td>
<td>97 (14.5)</td>
<td>105.3 (31.5)</td>
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<tr>
<td>Bagner et al., 2007</td>
<td>156.40 (34.30)</td>
<td>100.63 (26.22)</td>
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<td>Nixon et al., 2003</td>
<td>166.59 (18.93)</td>
<td>125.24 (21.67)</td>
<td>117.47 (31.69)</td>
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<td>Eisenstadt, et al., 1993</td>
<td>169.3 (25.90)</td>
<td>112.0 (20.10)</td>
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Child Compliance: Study #1

Alex

<table>
<thead>
<tr>
<th>Session</th>
<th>Baseline</th>
<th>CDI</th>
<th>PDI</th>
<th>FU</th>
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<tr>
<td>3-4</td>
<td>0.8</td>
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Noah

<table>
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<tr>
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</table>

Tami

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<tr>
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<td>7-8</td>
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<table>
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Child Compliance: Study #2

Kenneth

Adam

Christopher

Session

% Compliance

Pre PDI Post FU
## Consumer Satisfaction Ratings: Treatment Attitude Inventory

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<thead>
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<th>Study #1</th>
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<tr>
<td>Ware et al, 2006</td>
<td>Masse et al, (In Press)</td>
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<tr>
<td>Mean Score: 50 (out of 50)</td>
<td>Mean Score: 44.6 (out of 50)</td>
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Delaware’s B.E.S.T
(Bringing Evidence-based Systems of Care and Treatment) for Young Children

Purpose:

To create, maintain and sustain evidence-based mental health interventions using the system of care service delivery approach to give Delaware’s young children and their families the very BEST chance of success in home, school, community and life.
Home-Based PCIT Clinical Structure

NCC
- 2 Clinicians
- 2 Behavioral Specialists
- 46 Families

Sussex
- 2 Clinicians
- 2 Behavioral Specialists
- 59 Families

Delaware’s B.E.S.T. For Young Children and Their Families

Division of Prevention and Behavioral Health
Data Collection

Local Evaluation
- **DE-IDENTIFIED**
- Qualtrics web-based system
- Clinicians enter data
- Evaluation team support when needed

National Outcome Study
- 2-3 Hour interviews
  - Behavior Observations
- Interviewers enter data
- BL, 6, 12, 18, 24 months
- Mostly in-home interviews
Data Collection Measures

Local Evaluation
- ECBI
  - Intensity
  - Problem
- DPICS
  - Positive Parenting Skills
  - Avoid Skills
  - Child Compliance Rates

National Outcome
- Caregiver Strain Questionnaire
- Child Behavior Behavior Checklist
- Columbia Impairment Scale
- Devereux Early Childhood Assessment
- Parenting Stress Index
- Pre-School Behavior Rating Scale
Child Behavior Checklist 1.5-5 (CBCL 1.5-5): Aggressive Behavior subscale (t-scores)

Baseline 6 Month Follow-up 12 Month Follow-up

<table>
<thead>
<tr>
<th>Time</th>
<th>N</th>
<th>Score</th>
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<tbody>
<tr>
<td>Baseline</td>
<td>54</td>
<td>71.7</td>
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<tr>
<td>6 Month Follow-up</td>
<td>31</td>
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<tr>
<td>12 Month Follow-up</td>
<td>18</td>
<td>63.56</td>
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Clinically significant

$p < .05$

n.s.
Devereux Early Childhood Assessment (DECA): Attachment/Relationships subscale (t-scores)

- Baseline: 36.76
- 6 Month Follow-up: 41.06
- 12 Month Follow-up: 40.83

Clinical concern

N < .05
n.s.
Devereux Early Childhood Assessment (DECA): Self-control subscale (t-scores)

Baseline 6 Month Follow-up 12 Month Follow-up

Self-Control

34.29 43.06 42

Time

N = 41 N = 31 N = 18

p < .05 n.s.

Clinical concern
Conclusions

• Preliminary Evidence shows home-based is comparable to clinic-based on particular outcome variables
• Promising delivery approach for EBT’s: Increasing demand in current treatment marketplace
• Further research needed: RCT’s, clinical trials
  • Potential Research Areas:
    • Cost effectiveness
    • Attrition rates
    • Coaching styles (qualitative/quantitative)
    • Hybrid model?
    • Rate of Response
    • Parental Stress