Using Media to Improve Parenting: Effects of the *Triple P Parenting Video Series* on Children’s Behavior and Parenting Practices

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Collaborators

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- Julie C. Rusby, Ph.D., Co-Investigator, Oregon Research Institute
- Ryann N. Crowley, M.S., Data Analyst, Oregon Research Institute
The challenge of reaching parents with effective parenting interventions

- Most parents struggle from time to time with difficult child behaviors
- Despite effectiveness, few parents participate in evidence-based parenting programs (Sanders et al., 2007)
- Limited availability, especially outside of major metropolitan areas (Connell et al., 1998)
- Poor participation – substantial challenges in recruiting and retaining parents (Spoth & Redmond, 2000)
Limited reach of evidence-based parenting programs

- Limited availability + poor participation = limited reach
- Thus, most parents who could benefit from parenting assistance never receive it
The potential of the mass media

- Media-based approaches hold significant promise as part of a population-wide strategy for bringing evidence-based parenting practices to a broad range of parents
  - Dramatically increased reach
  - Value of video-based modeling
  - Decreased stigma and cost
  - Good vehicle for reaching the target audience – parents are interested in receiving parenting information via television, videos, and the Internet
How parents would prefer to receive information about effective parenting

- The highest preference ratings were for TV programs, online programs, written materials
- Lowest ratings were for home visits, therapists, and parenting groups – the most common evidence-based approaches

[Bar chart showing percent indicating "quite" or "very interested" in receiving parenting information in each of nine formats]
A public health perspective

- In a public health framework, media-based approaches would...
  - be part of a larger system of supports
  - complement more intensive supports
  - extend the reach of parenting programs to those who might not otherwise be reached

- Even modest effects of a media-based program on parenting could translate into substantial benefits when multiplied across thousands or millions of parents and would cost less than parenting groups
The Triple P Parenting Media Study
(NIDA Grant # R01 DA021307)

- The Triple P Parenting Media Study tested the efficacy of two versions of a 10-episode media series on parenting against a waitlist control.
- Content based on the *Triple P Positive Parenting Program*.
The Triple P Parenting Media Study

- Randomized design
  - Standard version of the *Triple P Parenting Video Series*
  - Enhanced version of the *Triple P Parenting Video Series*
  - Waitlist control

- Assessments
  - Baseline
  - Post-intervention
  - Six-month follow-up

- Research sites
  - Eugene and Portland, Oregon
The Triple P Parenting Media Study

- **Target Sample**
  - Parents of 3 – 6 year-old children
  - Having difficulty handling their children’s behavior problems
  - Clinical levels of child behavior problems – 1 standard deviation or more above the mean on the ECBI
  - Not otherwise receiving parenting support services
The **Triple P Parenting Video Series**

- 10 episodes
- Each episode about 12 – 15 minutes
- Infotainment-style, broadcast quality
- Designed to have broad reach and broad appeal
- Two versions: Enhanced version targets specific psychological processes (e.g. attributions, self-efficacy) AND parenting skills
Program topics

- Overview of positive parenting
- Encouraging behavior you like
- Teaching new skills and behaviors
- Managing misbehavior
- Dealing with disobedience
- Handling fighting and aggression
- Planning for and dealing with high-risk situations
- Establishing good bedtime routines
- Shopping successfully with children
- Raising confident and competent children
Intervention procedures & exposure

- Episodes on DVD mailed twice per week to those randomized to receive intervention
- Weekly phone call to assess exposure and appraisal
- Dosage
  - 78% watched minimum dosage (at least first 4)
  - 72% “completed” the series (watched 8 or more)
  - 65% watched all 10 episodes
Measures

- Mother questionnaire
  - Child behavior (Eyberg Child Behavior Inventory, Parent Daily Report Checklist, Strengths and Difficulties Questionnaire)
  - Parenting practices (Parenting Scale, Parenting Practices Scale, Proactive Strategies)
  - Parent-child relationship (positive, conflict)
  - Childrearing knowledge (multiple choice quiz)
  - Self-efficacy (Parenting Tasks Checklist)
  - Intent to implement targeted strategies (based on TP)
  - Stress (Depression Anxiety Stress Scale)
Measures

- Mother phone interview – Parent Daily Report Interview
  - Three 10-15 minute phone interviews per timepoint, a few days apart
  - Child behavior
    - Frequency of specific child problem and prosocial behaviors in past 24 hours
  - Parenting practices
    - Asked to describe how they handled specific discipline situations in the past 24 hours; coded by trained coders
Measures

- Parent-Child Play-Task Observation System
  - Two-hour lab visit
  - 60-70 min series of mother-child structured play-task activities
    - Playing
    - Mom distracted by duties
    - Cleaning up
    - Waiting with nothing to do
    - Teaching
    - Transition from fun activity to not-fun activity
  - Coded by independent, trained coders
Analyses

- Random Coefficient Latent Growth Modeling
  - Accounts for measurement error
  - Makes use of all available data, accounts for missingness
  - Improves our power to detect small effects
  - Yet is still a quite conservative test

- Looks at normative change over time for both intervention and control groups

- Then looks at whether there is significant change in the intervention group above and beyond that normative change
Sample description

- Total N = 321
- Mean age = 33; age range = 21 – 63
- 15% African-American, 9% Hispanic
- 25% high school education or less; 49% some college; 14% college grad; 12% graduate school
- 37% make < $20,000/yr; 41% make $20,000-$50,000; 22% make > $50,000
- 31% single mothers
- 48% not working
Parents’ appraisals of the videos

- Parents’ satisfaction was high – positive ratings for interesting/entertaining, useful, realistic/familiar

- Ratings of interesting/entertaining and useful were NOT predicted by child gender, minority status, mother age, single parent status, mother depressive symptoms, or mother working

- Thus, the videos were equally interesting, useful, and entertaining across these sociodemographic groups.
Parents’ appraisals of the videos

- Higher ratings of interesting/entertaining and usefulness were related to lower income and lower educational levels, however.
- Those most challenged by their children’s behavior problems at baseline AND those with higher levels of overreactive or lax parenting at baseline found the videos more useful and realistic/familiar.
- Thus, the videos were most appealing to our most important target audiences.
## Child outcomes

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Cohen’s d 6-mos FU</th>
<th>Cohen’s d Post-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child problem behavior intensity (ECBI - Q)</td>
<td>.54*</td>
<td>.55*</td>
</tr>
<tr>
<td>Problem behavior (PDR Checklist - Q)</td>
<td>.56*</td>
<td>.62*</td>
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<tr>
<td>Problem behavior (PDR Interview)</td>
<td>.36*</td>
<td>.27*</td>
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<tr>
<td>Child demand/interrupt (Direct obs)</td>
<td>.04</td>
<td>.26</td>
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<tr>
<td>Prosocial behavior (PDR Checklist - Q)</td>
<td>.40*</td>
<td>.34*</td>
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<tr>
<td>Prosocial behavior (SDQ - Q)</td>
<td>.24*</td>
<td>.30*</td>
</tr>
<tr>
<td>Positive behavior (PDR Interview)</td>
<td>.33*</td>
<td>.31*</td>
</tr>
<tr>
<td>Child positive behavior (Obs Rating)</td>
<td>.02</td>
<td>.02</td>
</tr>
<tr>
<td>Conflict in parent child relationship (Q)</td>
<td>.36*</td>
<td>.18*</td>
</tr>
<tr>
<td>Positive parent child relationship (Q)</td>
<td>.28*</td>
<td>.19</td>
</tr>
<tr>
<td>Positive interaction (Direct Obs)</td>
<td>.34*</td>
<td>.10</td>
</tr>
</tbody>
</table>

* p<.05 or better
Child behavior problems - intensity

Baseline  Post-test  6-mo follow up

Tx
Control

Clinical Cutoff
## Clinically significant change - ECBI

<table>
<thead>
<tr>
<th>ECBI – Intensity scale</th>
<th>Post</th>
<th>6 mos</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tx</td>
<td>Control</td>
</tr>
<tr>
<td>% Reliable Change Index &gt; 1.96</td>
<td>39</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>38</td>
<td>16</td>
</tr>
<tr>
<td>% Moved from Clinical to Non-Clinical</td>
<td>23</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>10</td>
</tr>
<tr>
<td>% Clinically Significant Change</td>
<td>22</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>9</td>
</tr>
<tr>
<td>% Deteriorated</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
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**Parenting Media Project**
# Parenting outcomes

<table>
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<tr>
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<th>Cohen’s d Post-Test</th>
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<tbody>
<tr>
<td>Dysfunctional parenting practices (PS - Q)</td>
<td>.31*</td>
<td>.09</td>
</tr>
<tr>
<td>Inappropriate discipline (PPS - Q)</td>
<td>.28*</td>
<td>.14</td>
</tr>
<tr>
<td>Inconsistent discipline (PPS - Q)</td>
<td>.30*</td>
<td>.32*</td>
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<tr>
<td>Negative/positive strategy to misbehav (PDR)</td>
<td>.28*</td>
<td>.26</td>
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<tr>
<td>Use of proactive strategies (Q)</td>
<td>.23*</td>
<td>.16*</td>
</tr>
<tr>
<td>Positive reinforcement (PDR Interview)</td>
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<td>.13</td>
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<tr>
<td>Effective parenting strategies (Obs Rating)</td>
<td>.32*</td>
<td>.15</td>
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<tr>
<td>Mother redirect after child negative behav</td>
<td>.28*</td>
<td>.12</td>
</tr>
<tr>
<td>Mother converse (Direct Obs)</td>
<td>.09</td>
<td>.24*</td>
</tr>
<tr>
<td>Mother guidance (Direct Obs)</td>
<td>.10</td>
<td>.26*</td>
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</tbody>
</table>

* p<.05 or better
## Clinically significant change – PS Total

<table>
<thead>
<tr>
<th>Dysfunctional Parenting (PS total)</th>
<th>Post</th>
<th>6 mos</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tx</td>
<td>Control</td>
</tr>
<tr>
<td>% Reliable Change Index &gt; 1.96</td>
<td>18</td>
<td>5</td>
</tr>
<tr>
<td>% Moved from Clinical to Non-Clinical</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>% Clinically Significant Change</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>% Deteriorated</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

Parenting Media Project
## Proximal outcomes - mother

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Cohen’s d Post-Test</th>
<th>Cohen’s d 6-mos FU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Childrearing Knowledge</td>
<td>.57*</td>
<td>.43*</td>
</tr>
<tr>
<td>Intent to Implement Targeted Practices</td>
<td>.54*</td>
<td>.33*</td>
</tr>
<tr>
<td>Stress</td>
<td>.35*</td>
<td>.12</td>
</tr>
</tbody>
</table>

* p<.05 or better
Who benefits most, who least?

- Variables examined
  - Child gender
  - Minority (non-white, non-Hispanic)
  - Single mother status (vs. partner)
  - Household income
  - Mother educational level
  - Mother working (working vs. not working)
  - Mother age (range 21-63)
  - Baseline level of child problem behaviors
  - Baseline level of maternal depression
  - Baseline dysfunctional parenting practices
Who benefits most, who least?

- Non-working Tx moms (vs. working Tx moms)
  - Greater improvement in use of proactive strategies \((p = 0.036)\) at post and 6 mos
  - Greater improvement in child prosocial behavior \((p = 0.004)\) at post

- Younger Tx moms (vs. older Tx moms)
  - Greater decreases in dysfunctional parenting strategies \((p = 0.022)\) at post

- Less depressed Tx moms (vs. more depressed Tx)
  - Greater increases in proactive strategies \((p = 0.009)\) at 6 mos
Summary of results

- Videos were appealing across subgroups, especially the target population
- Results show that a stand-alone video series can achieve meaningful effects on
  - Children’s positive and problem behavior
  - Mothers’ positive and dysfunctional parenting practices
  - Mothers’ parenting knowledge
  - Mothers’ intent to use targeted parenting strategies
  - Mothers’ stress
- Some subgroup effects, but no strong pattern across outcomes
Still to analyze

- Effects on additional “proximal” outcomes: self-efficacy, strategies for handling difficult thoughts and feelings, social support, attributions
- Effects on fathers’ reports of their parenting practices and proximal outcomes
- Differential effects between Standard and Enhanced versions on all outcomes
- Mediation analysis to identify the extent to which changes in proximal outcomes are related to changes in parenting practices and child behavior
Implications...

- Media can reach and engage a large number and broad range of parents.
- Media-based approaches to parenting supports can be an effective component of a population-based approach.
- Media-based parenting programs can have a positive, meaningful, and lasting impact on important outcomes.
Thank you