Examining Quality of Care and Outcomes in Group Homes for Youth

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Prevention Research Seminar, 3/14/12
Background and Overview

- One of the most commonly used out-of-home placements for youth with mental health and behavioral problems

- Limited Research
  - Promising literature from 1970s, ‘80s
    - Teaching Family Model
  - Sparse literature is mixed
    - GH’s worse than TFC (Chamberlain)
    - GH’s better than TFC (Lee)
    - GH’s and TFC comparable (Farmer)
Problems Created by lack of Research

- Little known about what happens in group homes
  - Quality of care?
  - Key Processes?

- Concerns about effectiveness

- Concern regarding potential iatrogenic effects

- Highly publicized negative outcomes
  - No substantial data to influence policy debates

- Cost – worth it?

- Paradigmatic misfit: focus on least restrictive care
Current Study

- **2006 – Application to NIMH to study group homes**
  - Argued that policy decisions were/are being made that are not based on data
  - Adequate data do not exist
  - Therefore, we need a study to examine whether, how, and under what circumstances group homes can be effective
- **Funded 2007 - 2012**
Specific Aims

- Outcomes for youth in group homes
- Effects of organizational factors and core processes on outcomes
- Rates and predictors of iatrogenic effects
- Does adherence to a promising model of group home treatment (i.e., Teaching Family) produce more positive outcomes for youth?
Study Design

- Longitudinal study (14 sites/47 homes/573 youth)
- Quasi-experimental (half Teaching Family; half not)
- 2 year recruiting period
- In-person interview with staff and youth (every 4 months)
- Phone interview with caregiver or legal guardian (pre-admission and post discharge at 4 and 8 months)
- Review of youth case record
- Observational Interview
- Glisson measure (organizational culture/climate)
- Director Interviews
The Teaching Family Model

- **Achievement Place Model**
  - Early 1970s, Univ. of Kansas
- **Most promising data on group home care**
  - Improvements across time, better outcomes than non-TF group homes, better implementation of key mediators (adult-child interactions, self-esteem, locus of control, etc.)
- **Underpinning for Boys Town model**
- **Research in 70s, 80s (BT more recently)**
  - Small n’s, inadequate designs, does not meet current EBP standards
Key Elements of Teaching
Family Model

- Family-style living (ideal is a married couple as Teaching Parents)
- Training, consultation, evaluation of Teaching Parents
  - 24/7 professional consultation
  - Thorough recurrent evaluation and recertification
- Proactive teaching interactions focused on positive prevention and youths’ skill acquisition
- Peer leadership/self-governance
Agency Selection and Description

- List of all licensed homes in North Carolina
- Included all TF-affiliated programs; 1 non-TF program in same catchment area selected randomly
- 2 or more homes
- 10 or fewer youth per home
- Non-specialized homes
- Licensed by DSS or Mental Health
- Unlocked campus and community based programs
- Referrals to program came from a variety of sources (e.g., Juvenile Justice, Mental Health, DSS, family)
Participating Agencies

- 14 Agencies
  - 7 Teaching Family
  - 7 non-Teaching Family

- 2-6 Homes per Agency
  - 2-10 kids per home
  - 49% boys, 38% girls, 13% co-ed
Agency Directors

- Similar in gender, 57% men
- Similar in tenure in position
- Race
  - 100% Teaching Family agency directors are white
  - 43% of non-Teaching Family are white
Models

- 93% of directors report using a model
  - All Teaching Family directors report using Teaching Family Model
  - Models cited by non-Teaching Family directors include behavior modification, “model of care,” cognitive based, Aggression Replacement Therapy, “try to be a good role model”
Restraint Policies

- Allow use of physical restraint:
  - 57% of Teaching Family homes
  - 86% of non-Teaching Family Homes
Campus?

- 55% Teaching Family homes are campus-based
- 27% non-Teaching Family homes are campus-based
Service Delivery

- Few agencies provide only group home care
  - 86% of Teaching Family agencies provide other services
  - 83% of non-Teaching Family agencies provide other services
- TFC and Day Treatment were more commonly offered by Teaching Family than non-Teaching Family
# Primary Staff

<table>
<thead>
<tr>
<th></th>
<th>TF</th>
<th>Non-TF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (% female)</td>
<td>55%</td>
<td>57%</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>21%</td>
<td>69%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>74%</td>
<td>25%</td>
</tr>
<tr>
<td>Age</td>
<td>Range = 23-65 Median = 33</td>
<td>Range = 24-57 Median = 33</td>
</tr>
</tbody>
</table>
## Primary Staff: Education Level

<table>
<thead>
<tr>
<th></th>
<th>TF</th>
<th>Non-TF</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>15%</td>
<td>25%</td>
</tr>
<tr>
<td>Some College</td>
<td>18%</td>
<td>32%</td>
</tr>
<tr>
<td>College Degree</td>
<td>61%</td>
<td>39%</td>
</tr>
<tr>
<td>Post-Graduate</td>
<td>5%</td>
<td>4%</td>
</tr>
</tbody>
</table>
Staff Rating:
Overall, how would you rate the staff who work in this home?

<table>
<thead>
<tr>
<th>Rating</th>
<th>TF</th>
<th>Non-TF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Good</td>
<td>74%</td>
<td>39%</td>
</tr>
<tr>
<td>Pretty Good</td>
<td>22%</td>
<td>39%</td>
</tr>
<tr>
<td>Average</td>
<td>0%</td>
<td>18%</td>
</tr>
<tr>
<td>Too Mixed to Rate</td>
<td>4%</td>
<td>4%</td>
</tr>
</tbody>
</table>
Youth Demographics

- **Number of Youth**
  - 573 total
    - 371 Teaching Family
    - 202 Non-Teaching Family

- **Youth Age**
  - Range: 6-20
  - Average: 14.6

- **Average Length of Stay**
  - Overall: 328 days (~11 Months)
  - TF: 331
  - Non-TF: 323
Youth Demographics

- **Sex**

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>TF</td>
<td>48.5</td>
<td>51.5</td>
</tr>
<tr>
<td>Non-TF</td>
<td>47.4</td>
<td>52.6</td>
</tr>
<tr>
<td>Overall</td>
<td>48.1</td>
<td>51.9</td>
</tr>
</tbody>
</table>

- **Race**

<table>
<thead>
<tr>
<th></th>
<th>African American</th>
<th>White</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>TF</td>
<td>29.1</td>
<td>55.0</td>
<td>15.9</td>
</tr>
<tr>
<td>Non-TF</td>
<td>38.9</td>
<td>51.6</td>
<td>9.5</td>
</tr>
<tr>
<td>Overall</td>
<td>32.5</td>
<td>53.8</td>
<td>13.7</td>
</tr>
</tbody>
</table>
### History of Abuse and Neglect

<table>
<thead>
<tr>
<th>Type of Agency</th>
<th>Type of Maltreatment</th>
<th>% of Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TF</strong></td>
<td>Physical</td>
<td>34.4</td>
</tr>
<tr>
<td></td>
<td>Sexual</td>
<td>32.1</td>
</tr>
<tr>
<td></td>
<td>Emotional</td>
<td>16.5</td>
</tr>
<tr>
<td></td>
<td>Neglect</td>
<td>82.1**</td>
</tr>
<tr>
<td><strong>Non-TF</strong></td>
<td>Physical</td>
<td>49.5*</td>
</tr>
<tr>
<td></td>
<td>Sexual</td>
<td>41.2</td>
</tr>
<tr>
<td></td>
<td>Emotional</td>
<td>18.6</td>
</tr>
<tr>
<td></td>
<td>Neglect</td>
<td>64.9</td>
</tr>
</tbody>
</table>

*p<.05  **p<.001
Lifetime Placement History

- 68% of youth had at least one previous out-of-home placement
- ~1/3 of youth in both TF and Non-TF had previous placement of...
  - Therapeutic or Regular Foster Care
  - Group Home
  - Residential Treatment Center
- Hospital – 33%* of Non-TF and 22% of TF
- Correctional Facility – 17% of TF and 14% non-TF

*significant at p < 0.05
Level of Severity at Admission

- Total score on Strengths and Difficulties Questionnaire
- 16 is the cutpoint between medium difficulties and high difficulties in a U.S.-normed sample
- Mean for both groups is in the high difficulties range
- *TF youth significantly less severe (p<.001)

<table>
<thead>
<tr>
<th></th>
<th>TF</th>
<th>Non-TF</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.3*</td>
<td>21.8</td>
<td>19.4</td>
<td></td>
</tr>
</tbody>
</table>
Youth Views
Consumer Questions: Staff Ratings

*P<.05
## Home Environment: Peers and Staff

<table>
<thead>
<tr>
<th></th>
<th>% Yes</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TF</td>
<td>Non-TF</td>
<td></td>
</tr>
<tr>
<td>Is someone helping you do the right thing?</td>
<td>95.5</td>
<td>96.7</td>
<td></td>
</tr>
<tr>
<td>Is there anyone who will set you up?</td>
<td>38.0</td>
<td>28.8*</td>
<td></td>
</tr>
<tr>
<td>Is there anyone you are afraid will hurt you?</td>
<td>5.2</td>
<td>7.3</td>
<td></td>
</tr>
<tr>
<td>Is there anyone looking out for you so you don’t get hurt?</td>
<td>85.5</td>
<td>86.4</td>
<td></td>
</tr>
</tbody>
</table>

* p<.01
In-Home Observations
The Observation

- Completed once in the first year of study
- Spent 2-3 hours in each home
  - Included “home tour,” talking to youth/staff, “hanging out”, eating dinner, observing free time
- Two observers for each observation
  - Discussed coding and reached consensus within ½ point between coders
  - Final score for each home is average for each item
- Measure adapted (“genericized”) from a Teaching Family observational measure
Domains Included in Observation

- **Youth Skills**
  - Social skills development; Understanding of program

- **Staff Teaching Skills**
  - Behavior/modeling; Teaching Skills

- **Structure and Systems**
  - Decision making; Peer leadership; Motivation system

- **Home Environment**
  - Atmosphere; Physical Environment; Basic Structure and safety
Criteria for Rating

- 5 = Extremely Satisfied
- 4 = Mostly Satisfied
- 3 = Slightly Satisfied
- 2 = Not Satisfied
- 1 = Extremely Dissatisfied
# Youth and Staff Skills

<table>
<thead>
<tr>
<th></th>
<th>TF Average</th>
<th>TF Range</th>
<th>Non-TF Average</th>
<th>Non-TF Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greeting skills</td>
<td>4.0</td>
<td>2.5 - 5</td>
<td>2.8</td>
<td>2 - 4</td>
</tr>
<tr>
<td>Relevance to life</td>
<td>4.1</td>
<td>2 - 5</td>
<td>2.8</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Appropriate humor</td>
<td>4.3</td>
<td>3 - 5</td>
<td>3.4</td>
<td>2 - 5</td>
</tr>
<tr>
<td>Models interpersonal behavior</td>
<td>4.4</td>
<td>3 - 5</td>
<td>3.5</td>
<td>2 - 5</td>
</tr>
<tr>
<td>Recognizes appropriate youth behavior</td>
<td>4.0</td>
<td>2 - 5</td>
<td>2.4</td>
<td>2 - 5</td>
</tr>
<tr>
<td>Pre-teaching</td>
<td>3.5</td>
<td>2 - 5</td>
<td>2.4</td>
<td>2 - 4</td>
</tr>
<tr>
<td></td>
<td>TF Average</td>
<td>TF Range</td>
<td>Non-TF Average</td>
<td>Non-TF Range</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------------</td>
<td>----------</td>
<td>----------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Peer leadership</td>
<td>4.5</td>
<td>2 – 5</td>
<td>1.9</td>
<td>1 - 3</td>
</tr>
<tr>
<td>Positively focused motivation system</td>
<td>4.6</td>
<td>3 – 5</td>
<td>2.7</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Access to age-, Interest-appropriate items</td>
<td>4.3</td>
<td>3 – 5</td>
<td>3.4</td>
<td>2 - 5</td>
</tr>
<tr>
<td>Youth/Staff share meals</td>
<td>4.6</td>
<td>2 – 5</td>
<td>3.2</td>
<td>2 - 5</td>
</tr>
</tbody>
</table>
Overview of Observations

- Overall, TF is higher on nearly all domains than non-TF
- However, substantial variation within both TF and non-TF
- Pre-teaching seems under-utilized across homes
- The average Structure and Safety scores for both TF and non-TF homes were good
- There was a pattern of lower scores in non-TF homes. This suggests the need for ...
  - additional attention on adult-child interactions
  - opportunities for “normal” development
  - attention to the nature of the motivation system
A Preliminary Look at Youth Outcomes
Where to Start..........?

- Change across time?
  - Do kids improve while in group homes?
- Predictors and subgroups
  - For whom? Under what conditions?
- ALL very preliminary – what we’ll be working on in the coming year(s)....
Overall pattern across time
(Strength and Difficulties Questionnaire (SDQ))
Change over time: TF vs. non-TF

SDQ Total Problem Score

- non-Teaching Family
- Teaching Family

Admission  4 months  8 months  12 months
Youth Characteristics Related to Change from Admission to 4 months:

Age
Youth Characteristics Related to Changes During Group Home Stay: Race

![Bar graph showing youth characteristics related to changes during group home stay by race. The graph compares the percentage of youth who got better, stayed the same, and got worse among White and Non-White youth.]

- **White Youth**
  - Got Better: 23%
  - Stayed Same: 43%
  - Got Worse: 33%

- **Non-White Youth**
  - Got Better: 36%
  - Stayed Same: 37%
  - Got Worse: 27%
Adding Home-level factors: Observations

- **Home Observation Data**
  - Created 8 scale scores (based on domains)
  - Highly correlated with each other and with TF

- **None of the domains were related to change**
  - However, including domains made **age** becomes significant while in home, too
    - Older youth do better, when youth skills, staff teaching skills, motivational system, home atmosphere, home environment, home safety taken into account
    - Potential interaction effects????
Youth perceptions of staff are related to change:

- Admission to 4 months:
  - More improvement if youth view staff as:
    - Fair (p<.05), help learn things (p<.05), care (p<.1)

- 4 to 8 months:
  - Less significant...
  - More improvement if youth view staff as:
    - Fair (p<.1)
Conclusions

- We have a lot of work to do
- Non-comparable quasi-experimental study
- Clear differences among homes
  - Some related to model
  - Substantial variation within models
- At this point, no quick indicator of “good”
- Overall, youth improve in group homes
  - Picture’s much more complicated than this