Multidimensional Treatment Foster Care

What’s New in MTFC?

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Thank You

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ACF
WT Grant Foundation
Oregon Youth Authority
Lane County Dept. of Youth Services
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<td>Patricia Chamberlain</td>
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Foster Care
800,000 children annually (USDHHS, 2008)

- 54% of children entering care met clinical or borderline criteria for internalizing and externalizing behavior problems
- 42% of foster care children have been found to have lifetime inpatient psychiatry rates and 77% have been enrolled in residential treatment centers.
- Teens and young adults in foster care exhibit rates of problems and symptoms similar to those in mental health service sectors (McMillen et al., 2005) including:
  - high school graduation and employment rates below 50%
  - exceptionally low annual earnings,
  - high risk for teen pregnancy and HIV
  - high rates of criminal system involvement including arrests for violent offenses

Becker & Barth, 2000; D’Angelo et al., 1994; Courtney et al., 2005; Courtney et al., 2001; George, et al., 2002; Landsverk et al., 1998; McMillen et al., 2004; McMillen & Tucker, 1999; Risley-Curtiss, 1997; Stewart et al., 2002; Westat, 1991
Foster Care Disruptions

- Many of the early environmental stressors, behavioral, and emotional needs of youth in foster care contribute to their risk for failed foster care placements.
- During any 12-month period, up to 50% of children in foster care disrupt from their placements and have to be moved to another home or a more restrictive setting.
- Such changes in placement are linked to:
  - decreased likelihood of subsequent permanency
  - increased probability of developing future mental health problems especially externalizing problems
  - Increased costs for the child welfare system.

Core Elements of Effective Prevention & Early Intervention Programs

- Family-based programming
- Multiple systems targeted
- Strength-based approach
- Developmentally-appropriate approach
Multidimensional Treatment Foster Care (MTFC) Intervention Model

- Alternative to treating delinquent youth in aggregate-care settings
- Youth are placed individually in foster homes
- Treatment in a family setting and focusing on the youth and the family
- Intensive support and treatment in a setting that closely mirrors normative life
- Intensive parent management training is provided weekly to biological parents (or other aftercare resource)
- Youth attend public schools
MTFC

- Objective: To prevent the negative trajectory of delinquent behavior by improving social adjustment with family members and peers through simultaneous and well-coordinated treatments in the youth’s natural environment: home, school, & community.

- Treatment is provided in a family setting where new skills can be practiced and reinforced.
Critical Components of MTFC: Known Risk and Protective Factors

- Provision of close supervision
- Provision of consistent limits and consequences for rule violations and antisocial behavior (non-harsh discipline)
- Minimization of influence of delinquent peers
- Daily adult mentoring
- Encouragement/reinforcement for normative appropriate behavior and attitudes
- Youth’s parents increase skills at supervision, limit setting, reinforcement
Clinical Team

Program Supervisor – the disciplinarian
Family Therapist
Individual Therapist
Skills Trainer
Foster Parent Recruiter/PDR Caller
Foster Parent
Youth referred to MTFC
- Present with a high level of challenging behaviors – typical parenting strategies are ineffective
- Draw adults to set harsh reactive limits, to be negative, & to focus on discipline

Support foster parents & parents to re-establish the balance - reinforce normative & positive and to set non-punitive, appropriate limits
The Point and Level system is a daily behavior management program. It provides a concrete way for parents to:

- teach appropriate skills
- reinforce desired behaviors or attitudes
- provide consequences for problem behavior

Developed by PS and implemented by FP
Youth (ages 9–18) leaving the Oregon State mental hospital fared better in MTFC than in usual community services (Chamberlain & Reid, 1991)
- placed more quickly
- lower rates of behavioral and emotional problems
- stayed out of the hospital more days in follow-up

JJ Boys (ages 12–18) -- average of 14 criminal referrals (Chamberlain & Reid, 1998; Eddy, Whaley, & Chamberlain, 2004)
- fewer official and self-reported follow-up offenses
- spent more time in assigned placements
- returned to their families more often
- spent less time incarcerated and as runaways
- had fewer violent offenses
Randomized Trials

- JJ Girls (ages 13–17) -- average of 11 previous criminal referrals
  (Chamberlain, Leve, & DeGarmo, 2007)
- fewer incarcerations and less delinquency at follow-up
- the amount of unsupervised time youth spent associating with antisocial peers was a strong predictor of official and self-reported delinquent activities at follow-up
  (Eddy & Chamberlain, 2000)
Mediation Outcomes

Specific processes that drive positive outcomes:

- positive relationship with a mentoring adult
- close supervision
- fair and consistent discipline for rule violations and antisocial behavior
- completion of homework assignments
MTFC-P Randomized Trials

- Increased attachment behaviors
- Improvements in executive functioning
- Improvements in self-regulation (behavioral and physiological)
- Decreased foster parent stress
- Fewer out of home placements
- More stable permanent placement outcomes
Recognition


- 2000 Office of Juvenile Justice and Delinquency Prevention/Center for Substance Abuse Prevention/University of Utah Department of Health Promotion and Education. Selected as 1 of 7 Exemplary I programs (highest rating category) in the Strengthening America's Families series, based on scientific evidence of effectiveness.


- 2009 Top-Tier Practice by the Coalition for Evidence Based Policy
So What’s New?

- KEEP - Youth In Regular Foster Care
- Focus on Girls
  - Prevention Program for Middle School
  - MTFC-Girls (substance use, health risking sexual behaviors, relationships)
- Sleep for Preschoolers
One of the most frequently cited explanations for a failed foster placement is the inability of the foster parent(s) to manage a particular child’s behavior problems (Brown & Bednar, 2006; Holland & Gorey, 2004; James, 2004).

Within a sample of 246 children in foster and kinship care, Chamberlain and colleagues (2006) found that for each increase in the number of behavior problems above 6 that were reported to occur within a 24-hour period, there was a 25% increase in the risk for a negative change of placement within the next 12 months.
One effective solution that is potentially “doable” within overstressed child welfare systems is to improve foster parents’ ability to provide meaningful interventions and supports to the children who are placed with them.

The idea that foster parents can be trained to serve as therapeutic change agents shifts the focus from “foster care as maintenance” to “foster care as an active intervention” and capitalizes on an existing workforce that could be marshaled to help address the disparities faced by children in foster care.

(Ruff, Blank, & Barnett, 1990; Kerker & Dore, 2006; Chamberlain, Price, Leve, Laurent, Landsverk, & Reid, 2008)
What opportunities exist for improving foster care?
A Graduated Approach to Preventing Placement Disruptions in Foster Care

- Leave well enough alone
- Low intensity intervention
- High intensity intervention

Percent of placement failures based on number of prior placements
Parent Daily Report

- 5-10 minute telephone call, Behavior checklist format:
  - 0 = behavior did not occur
  - 1 = behavior occurred, was not stressful
  - 2 = behavior occurred, was stressful
Who Disrupts?

Number of behavior problems per day

1  2  3  4  5  6

After 6, every additional behavior problem increases probability of disruption by 25%
Cascading Dissemination of a Foster Parent Intervention: KEEP

- Collaboration with:
  - San Diego Department of Health and Human Services (Mary Harris, Director)
  - Child and Adolescent Services Research Center (Landsverk & Price)
  - OSLC

Targets permanency – Parent management training for foster parents
Cascading Dissemination of a Foster Parent Intervention
(NIMH Services Research Branch R01 MH60195)

**Phase 1**
Development of the intervention
Oregon 3 County Study ($N = 70$)

**Phase 2**
Original developers train and supervise Cohort 1 Interventionists in San Diego ($n = 508$).

**Phase 3**
Cohort 1 Interventionists from San Diego train Cohort 2 Interventionists ($n = 192$).
Developers supervise Cohort 1’s supervision of Cohort 2, but have no direct contact with Cohort 2 Interventionists.
Who participated in San Diego KEEP?

- Children who were going to a new placement (first time or change of placement) and their foster parents
- 700 foster children and their kin or foster parents
  - Hispanic: 36%
  - Caucasian: 28%
  - African American: 27%
  - Asian: 3%
  - Native American: 1%
Key Intervention Goals

- Promote the idea that foster parents can serve as key agents of change for children.
- Strengthen foster parent’s confidence and skills so they can change their child’s behaviors.
- Help foster parents use effective parent management strategies and provided them with support to do so.
- Increase short and long term positive child outcomes in multiple domains and settings – home, school, with peers.
Delivery

- Informal fun atmosphere--not class
- Groups 1 X per week for 16 weeks
- 90 minutes long
- 2 facilitators (lead and co)
- Missed sessions get home visit (20%)
- Snack and drink served
- Child care provided
- Home practice every week
- Groups are videotaped
- Clear guidance given to facilitators on curriculum content and engagement
- PDR 1 X per week
KEEP Curriculum

- 4 Key Roles (teacher, detective, coach, guardian angel)
- The Importance of Cooperation
- Teaching New Behaviors
- Using Incentives and Rewards
- Setting Limits
- Correction Strategies
- Balancing Encouragement and Limits
- Avoiding Power Struggles
- Pre-Teaching
- Super Tough Behaviors
- Promoting School Success
- Stress and Managing It
- Fostering and Family Relations
Behaviors that Stress Foster Parents:
% of occasions on which PDR behaviors were identified as somewhat or very stressful

<table>
<thead>
<tr>
<th>Item</th>
<th>Behavior</th>
<th>%</th>
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<th>Behavior</th>
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<tbody>
<tr>
<td>1</td>
<td>Daydream</td>
<td>13.0</td>
<td>16</td>
<td>Argue</td>
<td>64.1</td>
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<tr>
<td>2</td>
<td>Stay out late</td>
<td>15.4</td>
<td>17</td>
<td>School problem</td>
<td>65.1</td>
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<tr>
<td>3</td>
<td>Sluggish</td>
<td>23.4</td>
<td>18</td>
<td>Irresponsible</td>
<td>65.2</td>
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<tr>
<td>4</td>
<td>Soil</td>
<td>25.0</td>
<td>19</td>
<td>Tease/provoke</td>
<td>65.7</td>
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<tr>
<td>5</td>
<td>Nervous/jittery</td>
<td>27.4</td>
<td>20</td>
<td>Truant</td>
<td>66.7</td>
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<tr>
<td>6</td>
<td>Competitive</td>
<td>27.9</td>
<td>21</td>
<td>Lie</td>
<td>68.0</td>
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<tr>
<td>7</td>
<td>Wet</td>
<td>28.6</td>
<td>22</td>
<td>Fight</td>
<td>69.4</td>
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<tr>
<td>8</td>
<td>Short attention span</td>
<td>31.7</td>
<td>23</td>
<td>Steal</td>
<td>70.0</td>
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<tr>
<td>9</td>
<td>Depressed/sad</td>
<td>37.8</td>
<td>24</td>
<td>Backtalk</td>
<td>71.3</td>
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<td>10</td>
<td>Skip meals</td>
<td>38.6</td>
<td>25</td>
<td>Swear/obscene language</td>
<td>71.4</td>
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<tr>
<td>11</td>
<td>Jealous</td>
<td>41.4</td>
<td>26</td>
<td>Not mind</td>
<td>73.2</td>
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<tr>
<td>12</td>
<td>Complain</td>
<td>41.5</td>
<td>27</td>
<td>Defiant</td>
<td>74.4</td>
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<tr>
<td>13</td>
<td>Irritable</td>
<td>46.7</td>
<td>28</td>
<td>Inappropriate sexual behavior</td>
<td>76.9</td>
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<td>14</td>
<td>Boisterous/rowdy</td>
<td>46.7</td>
<td>29</td>
<td>Destructive</td>
<td>82.7</td>
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<td>15</td>
<td>Negative</td>
<td>58.6</td>
<td>30</td>
<td>Use drugs/alcohol</td>
<td>N/A</td>
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Child Behavior Outcome: PDR

### Graph

- **Y-axis**: Number of Behavior Problems
- **X-axis**: Time
- **Legend**:
  - Control
  - Tx

**Baseline**
- Control: 5.5
- Tx: 5.3

**Termination**
- Control: 5.0
- Tx: 4.1
Percentages of Exit Type by Group

- **Negative Exit**
  - Intervention: 9%
  - Control: 13%

- **Positive Exit**
  - Intervention: 13%
  - Control: 7%
Path model testing 2 things:
(1) the direct effect of intervention on positive reinforcement & child behavior problems
(2) the indirect effect of intervention on child behavior problems mediated through positive reinforcement
Predicted probability of negative exits by prior placements and intervention group

![Graph showing the predicted probability of negative exits by number of prior placements and intervention group]

- Mean Predicted Probability
- Number of Prior Placements

GROUP
- Control
- Intervention
Variation in Impact
# child problems @ termination X # at baseline

- Control Children
- Treatment Children

- < 4 behaviors: Control 2.6, Treatment 2.1
- 4 - 7 behaviors: Control 5.2, Treatment 3.7
- >7 behaviors: Control 8.3, Treatment 7.5

* p < .05 two-tailed
Middle School Girls
Middle School Girls

- Transition into Middle School presents complex set of challenges:
  - larger peer groups
  - increased expectations for time-management and self-monitoring
  - renegotiation of rules with parents
  - increased peer influence
  - puberty
For those in foster care, particularly girls, this transition is particularly challenging.

Social failures in middle school have been associated with myriad problems later including delinquency, substance abuse, poor school performance, mental health problems, and health risking sexual behaviors.
Goal: To develop and implement a multi-component preventative intervention model for 10-/11-year-old girls in the foster care system, beginning in the summer before entry into middle school and continuing throughout the first year of middle school.
Sample

- N = 100; 48 girls assigned to treatment and 52 girls assigned to the control condition
- Age: 11.54 years of age ($SD = .48$, range = 10.44 – 12.92)
- Race: 63% European American, 14% multiracial, 10% Latino, 9% African American, and 4% Native American
- Mean age of foster care entry: 7.63 years ($SD = 3.14$)
- Mean time in foster care was 2.90 years ($SD = 2.25$)
- 81% of girls had experienced more than one foster caregiver transition since placement ($M$ number of foster care placements = 3.90, $SD = 3.03$, Range = 1.0 - 18.0)
- 39% had clinical-level internalizing problems
- 43% had clinical-level externalizing problems
- 70% of the girls had clinical or borderline-clinical levels of externalizing or internalizing problems
- Average number of PDR behaviors 5.9 ($SD = 3.9$)
Intervention

- Parent Management Training for FPs
  - supervision and monitoring
  - positive reinforcement
  - parental involvement
  - how to talk about substance use, sexual behaviors

- Skill-Building for Girls
  - building positive relationships
  - problem-solving skills
  - sharing/cooperation with peers
  - perceptions of substance use, sexual behaviors, violence
  - how to talk about being in foster care appropriately

- Commitment Ceremony

- Ongoing support for FP throughout the first year of middle school (FP meetings) and PDR
Clinical Example
Outcomes

- At 6 Months post entry into middle school: Girls in the intervention had significantly lower rates of internalizing and externalizing problems (controlling for prior abuse history).
- At 12 Months 2.1% of the girls in the intervention condition versus 10.4% of the girls in the control condition reported using drugs in the past 6 months.
MTFC-Girls
Girls’ needs represent unique challenges for service providers and their numbers in juvenile justice are growing. In the last decade, male crime rates fell whereas female crime rates increased.

Girls comprised only 17% of the total detained population in the US, but represented 64% of the runaways, 47% of the truants, and 28% of the curfew violators (Desai et al., 2006).

- Girls are more likely than their male counterparts to have been a victim of child abuse and to have been placed out of their family homes (Leve & Chamberlain, 2005).
- The problems in girls’ families of origin are more dysfunctional and their treatment needs are more complex (Henggeler et al., 1987).
- Biological parent criminality predicts girl’s age of first arrest (Leve & Chamberlain, 2004).
- Family conflict has been found to predict a larger portion of female than for male offenses (OJJDP Girls Study Group, 2008).
- Girls who were subjected to multiple changes in caregivers are first arrested at an earlier age.
Delinquent girls are at risk for poor adult relationships, early pregnancy, and for transmitting myriad problems to their offspring.

At age 21, compared to their delinquent male counterparts, females who were delinquent as adolescents were 2.6 times more likely to have cohabited with more than one partner, were more likely to abuse or be abused by their partner, and were 2.8 times more likely to have become a parent (Moffitt et al., 2001).

Girls with high rates of public service utilization during the young adult transition and were 2.4 times more likely than their delinquent male counterparts to receive social welfare assistance from multiple government sources (Moffitt, Caspi, Rutter, & Silva, 2001).

In a 10-year follow-up study, Capaldi (1991) found that mothers who had their first child by age 20 were twice as likely to have children with early starting delinquency (prior to age 14) compared to mothers who had their first child after age 20.

53% of delinquent mothers had their children removed from their custody, and an additional 27% of delinquent mothers were unable to safely care for their children without assistance from welfare or other state services (Lewis et al., 1991).
Girls Study 1 and 2

- Total Sample: N = 166
  - MTFC = 81
  - GC = 85

  No Differences between groups at baseline

- 11.5 arrests (first at age 12 ½; 72% have at least 1 felony)

- 57% clinical-level and 17% borderline-level internalizing scores (CBCL)

- 47% clinical level depression

- Over 3/4 of study girls meet criteria for 3+ DSM-IV Axis 1 diagnoses

- 57% report an attempted suicide

- 66% used hard drug in last year (36% use weekly)

- 26% had been pregnant
<table>
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<tr>
<td>Physical Abuse</td>
<td>88%</td>
</tr>
<tr>
<td>Sexual Abuse</td>
<td>69%</td>
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<tr>
<td>Physical or Sexual</td>
<td>93%</td>
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<tr>
<td>Both</td>
<td>63%</td>
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<tr>
<td>Family Violence</td>
<td>79%</td>
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<tr>
<td>At least one act of sexual abuse &lt;13</td>
<td>76%</td>
</tr>
<tr>
<td>Average sexual abuse acts &lt;13</td>
<td>5</td>
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<tr>
<td>Ave. number of parental transitions</td>
<td>17</td>
</tr>
<tr>
<td>Ave. number of prior treatment placements</td>
<td>2.96</td>
</tr>
<tr>
<td>Mother convicted of crime</td>
<td>46%</td>
</tr>
<tr>
<td>Father convicted of crime</td>
<td>63%</td>
</tr>
<tr>
<td>At least 1 parent convicted</td>
<td>74%</td>
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Adaptations for Girls

- Providing girls with reinforcement and sanctions for coping with and avoiding social/relational aggression
- Working with girls to develop and practice strategies for emotional regulation such as early recognition of their feelings of distress and problem solving coping mechanisms
- Helping girls develop peer relationship building skills, such as initiating conversations and modulating their level of self disclosure to fit the situation
- Teaching girls strategies to avoid and deal with sexually risky and coercive situations
- Helping girls understand their personal risks for drug use, including priority setting using motivational interviewing and provision of incentives for abstinence from drug use monitored through random urinalysis
Social aggression includes strategies such as ignoring exclusion, gossip, and disdainful facial expressions (Underwood, 2003).

Although social aggression has been shown to negatively impact relationships for both boys and girls (Kupersmidt & Patterson, 1991), girls have been found to exhibit it more frequently.

Social aggression leads to peer rejection, loneliness, isolation, and depression. These negative effects appear to be stronger for girls (Crick, Casass, & Ku, 1999).
General Interventions

- Identification and Definition
  - Identify and define socially aggressive behaviors which are often subtle and do not appear to be serious (e.g., “it was just a look”).

- Behavior Management Plans
  - Establish behavior management plans to reinforce girls for abstaining from such tactics and to teach them how to cope with being on the receiving end of peer social aggression.

- Skills Practice
  - Asking for help, avoiding negative peers, self care.
Clinical Example: Victim

- Program Supervisor and Foster Parents communicated with teachers and coaches to monitor interactions with female peers and report on conflicts they observed.
- Becky told her therapist that she was great at making friends and the best at everything and didn’t understand why girls were mean to her.
- Individual therapist agreed with her strengths at making friends with her teammates, and engagement in prosocial interests with positive peers.
- Therapist role played modesty as a way to make/keep friendships with prosocial peers.
- Also reinforced her in the foster home for asking for help from adults.
- Skill Trainer practiced (role played) coping skills: walking away from teasing peers, asking for help, self care (e.g., exercise, fun activity).
- Family therapist worked with mom to reinforce use of coping skills at home.
Clinical Example: Perpetrator

- Established behavior goal related to positive interactions where foster parents gave and removed points for positive talk with peers: not spreading rumors or engaging in mean talk with peers and adults.
  - She wanted to earn a fuzzy poster as a reward, also wanted to earn sparkly gelly pens.
- Individual therapist used the frame that she missed the 5th grade which is when girls learn to be nice to each other.
- Direct skills practice in identifying social/relational aggression and role playing alternative ways to talk to peers.
- Skills coach reinforced positive talk during weekly sessions, especially giving appropriate compliments (e.g., “Your hair looks nice today”).
- Family therapist coached parents to engage in positive talk during sessions and give small consequences for mean/rude talk; worked with parents on noticing her strengths.
Research has linked experiences of childhood maltreatment with deficits in modulating emotions and regulating affective responses (Camras Ribordy, Hill, & Martino, 1988).

Deficits of emotional dysregulation include difficulty controlling behaviors in the face of emotional distress and deficits in the functional use of emotions as a source of information (Gratz, Matthew, et al., 2008).
General Interventions

- **Awareness**
  - Helping girls to increase their awareness of situations that provoke negative emotions and teaching strategies for controlling their immediate impulses and behaviors.

- **Coping Strategies**
  - Therapists helped girls identify “effective” and “ineffective” coping strategies (e.g., exercise and listening to music vs. substance use and yelling at people) and tracked use of coping skills.

- **Reinforcement**
  - Foster parents and therapists worked together to positively reinforce girls for identifying their emotional states and for practicing coping strategies that helped them modulate their level of emotional arousal and responses in difficult situations.

- **Decision Making**
  - The principal that major life decisions or actions that could result in significant long-lasting changes should never be made when one is upset or agitated was taught and practiced: control your behaviors when upset rather than controlling the occurrence of the negative emotions themselves (Gratz & Roemer, 2008).
Behavior goal of “Going with the Flow” targeted that included calm and flexible responses to rules and changes in schedule. Support was given to foster parents to avoid engagement in arguments.

Jade told therapist that she didn’t like to be controlled.

The control frame was used to target skills practice related to “Positive Adult Manipulation” – such as asking for things in a way that makes adults want to give them to you and remaining calm so that peers/adults don’t know they can upset you.


Skills coach reinforced instances when Jade regulated emotions in the community. Got her involved in yearbook club.

Family Therapy: Mother was highly volatile and contact mom was a clear predictor of later emotional outbursts.
Girls typically lacked relationships with close female peers, preferring instead to associate with older, delinquent male peers.

General Interventions

Skills Practice
- Girls were reinforced for practicing the targeted skills first in the community with the skills coach, and then in the foster home with her foster parents, and then at school with her peers.
- Reinforcement included earning daily points that translated into increases in privileges and material rewards.
Clinical Example

- Worked with current school to monitor peer interactions and identify/reduce contact with negative peer influences while in the program.
- Individual therapist used American Girls book to facilitate skills practice. Took “What kind of friend are you?” and “What qualities do you want in a friend” type quizzes which facilitated discussions.
- Therapist role-played initiation of appropriate conversations, use of good boundaries (i.e., reducing self-disclosure about past behaviors).
- Skills coach reinforced friendship/social skills in the community as well as reports from the program, later making suggestions for interactions with foster parents and peers at school.
- Family therapist worked with parents on supervision and increasing contact with prosocial peers/reducing contact with negative peers.
- School wrote a letter to former school about her new reputation and peer pressure resistance skills.
Avoiding Risky Sexual Encounters

- Several studies have found that a cluster of problem behaviors including delinquency, academic failure, and substance use co-occur with risky sexual behavior and teenage pregnancy (Ary et al., 1999; Huizinga, Loeber, & Thornberry, 1993; Landsverk, Garland, & Leslie, 2001; Pilowsky, 1995).

- 40% of the girls in our study reported having had sex with a stranger/someone known less than 24 hours in the past year, and 46% had 3 or more partners in the past year, yet over one-third never or rarely used safe sex practices (Leve & Chamberlain, 2004).
General Interventions

- Sexual Responsibility
  - Girls were taught strategies for being sexually responsible, including specific training on decision making, identification and awareness of sexual coercion, and refusal skills.

- Role Play exercises were conducted using the ‘Dating and Sexual Responsibility’ video vignettes and the ‘Virtual Date’ activity (Northwest Media, 2002) as a stimulus for discussion.
  - The videos help youth identify coercive behavior and practice refusal skills
  - The Virtual Date depicts key decision points in a practice date
Clinical Example

- Conducted regular random UAs. Mary earned many clean UAs in the program and was reinforced with points and given consequences (activity restriction) for dirty UAs. Other substance use intervention (described next).

- Mary asked for help in avoiding sexually risky/coercive situations after a man came to the drive-up window at her coffee cart job and propositioned her.

- Therapist and youth practiced general assertiveness as well as specific safety and refusal skills including: role-play practice for what to say to people at the drive-up window, avoiding conversations with people on the city bus (her method of transportation to and from work), and assertively saying no (physically and verbally) to unwanted sexual advances.
Clinical Example cont.

- The dating and sexual responsibility videos and virtual date were used to facilitate discussion and skills practice. Developed a step-by-step safety plan for potential future risky situations.
- Skills coach reinforced appropriate assertiveness in the community including body language (walking with confidence, looking away from men).
- Family therapist encouraged mom and grandmother to support youth’s assertiveness skills. Coached mom on identifying potentially risky men and not bringing them home.
In our study, the majority of girls had serious problems with substance use, with 12-month prevalence rates of 46% for marijuana and 77% for alcohol. The use of hard substances in the prior 12-months was also high: methamphetamine (29%), cocaine or crack (13%), hallucinogens (7%), and ecstasy (5%).

**General Interventions:**

- **Motivational Interviewing**
  - Motivational interviews designed to calibrate girl’s impressions of where her substance use patterns stacked up relative to other people her age. Help with concrete personal goals; given within the first three weeks of placement.
  - Assessment of ‘readiness to change’ and to provide support and encouragement for moving one step further along the continuum toward abstinence.
Goal Setting
- The individual therapist helped the girl identify steps toward her personal goals.
- The skills coach worked to set up opportunities for making progress on those goals.

Urinalysis
- Girls were given random urinalysis tests and additional tests were given if there was a suspicion of use (e.g., missed classes at school).
- Foster parents and skills coaches reinforced clean UAs with points and verbal statements.
- Girls earned a reward for each negative test when illegal substances were not detected and were given consequences such as restricted free time, work chores, and lower privilege levels for positive tests.

Refusal Skills
- The individual therapist role played substance use refusal skills
Clinical Example

- Regular random UAs (1-3 times per week) with $ and bonus points for clean UAs, increased privileges and significant point loss (100 points), reduction in privileges, and work chore for dirty UAs.
- Regular room searches for substances and paraphernalia.
- Therapist did a functional assessment of substance use to identify “triggers.”
- Olivia indicated that she was only interested in marijuana and planned to continue to use after the program. She liked the rush of being sneaky with parents.
- Videotaped role play of risky situations and strategized ways to avoid/get out of situations.
- Motivational Interviewing and substance use norms education.
Clinical Example cont.

- At 6 months she identified that her current risk was not being busy with things that interested her, but that she was using or tempted to use at school or work.
- She reduced her identity as a pot-head, and wanted a career as an architect. Saw that smoking pot would not help her achieve that goal.
- Skills coach worked with her to plan replacement behaviors for when bored and setting/refining future oriented goals. Found her a volunteer job at a pet store. Weekly exploration of prosocial activities.
- Family therapist worked with mom and step dad to engage youth in prosocial activities, to increase supervision and give consequences for use/suspected use.
Arrest Rates

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>12-months</th>
<th>24-months</th>
<th>36-months</th>
</tr>
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<tbody>
<tr>
<td>Group Care</td>
<td>4.5</td>
<td>1.3</td>
<td>1.4</td>
<td>1.1</td>
</tr>
<tr>
<td>MTFC</td>
<td>5.2</td>
<td>0.8</td>
<td>0.7</td>
<td>0.3</td>
</tr>
</tbody>
</table>
Days in Locked Settings

- **Group Care MTFC**
  - Baseline: 90 days
  - 12-months: 57 days
  - 24-months: 72 days

- **MTFC**
  - Baseline: 75 days
  - 12-months: 22 days
  - 24-months: 20 days
Covariates:
Age
BL criminal behavior
Sexual activity
BL Pregnancy

Odds for pregnancy post BL 2.44 times larger for GC than MTFC

Kerr, Leve, & Chamberlain, 2009
<table>
<thead>
<tr>
<th>Substance</th>
<th>Baseline MTFC GC</th>
<th>12 Month MTFC GC</th>
<th>24 Month MTFC GC 67 65</th>
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</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>2.72 3.02</td>
<td>2.14 2.22</td>
<td>1.60 1.70</td>
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<tr>
<td>Marijuana</td>
<td>2.86 3.07</td>
<td>1.97 2.10</td>
<td>1.25 1.58</td>
</tr>
<tr>
<td>Hard Drugs</td>
<td>2.49 2.65</td>
<td>1.97 1.84</td>
<td>0.77 0.96</td>
</tr>
</tbody>
</table>

1= Never  2= Tried Once or Twice  3= Occasionally  4= 1-6/per week  5=1 or more a day
In the process of finalizing 36 month data
Conducting Long-Term follow-up of girls in young adulthood
Girls will be ages 21-28
Will be looking at long-term outcomes including parenting and costs
Follow-Up

- 2 (34%) to 10 years since last contact
- Very transient population
  - less than 15% had previous contact information
- 20-30 hours of dedicated time
  - Family contact sheets (grandparents best!)
  - No fee search engines
  - Fee based search engines
  - Social Networking Sites (40 found!)
- 91% found; 82% contacted and consented
- No official declines
New Outcomes for MTFC-P
MTFC-P improves children’s sleep patterns

Fig. 1 Differences in mean sleep duration between groups. 
\(^a p < .01; \(^b p < .01. \) Note: RFC regular foster care; TFC treatment foster care; LIC low income community; UMC upper middle income community.

Sleep duration (minutes)

- RFC
- TFC
- LIC
- UMC
MTFC children go to bed earlier

Fig. 3 Differences in mean lights out time between groups.

\[ a \, p < .001; \, b \, p < .001; \, c \, p < .001. \]  
Note: RFC regular foster care; TFC treatment foster care; LIC low income community; UMC upper middle income community
MTFC children spend more time in bed

Fig. 4 Differences in mean time in bed between groups. 

RFC regular foster care; TFC treatment foster care; LIC low income community; UMC upper middle income community

a $p < .001$; b $p < .001$. Note:
MTFC children fall asleep sooner

Fig. 5 Differences in mean sleep onset time between groups.

Note: RFC regular foster care; TFC treatment foster care; LIC low income community; UMC upper middle income community.
Why?

- An increasing number of RCTs have indicated that theoretically based, developmentally sensitive interventions can produce positive outcomes for youth with mental health and behavioral problems (NIMH, 2004)
- Estimated that 90% of public systems do not provide true evidence-based practices (Hoagwood & Olin, 2002)
- Recent push to provide evidence-based practices in community settings
- As the use of evidence-based practices increases within community settings, evidence-based methods for measuring implementation processes are necessary
Currently Funded Project Provides Unique Opportunity

Existing Programs in over 70 sites Internationally

Previous involvement in numerous strategies to “scale-up” MTFC.
- Rolling Cohorts in England
- Cascading Dissemination (KEEP) in San Diego
- University/Agency Partnership in Sweden
- Community Development Teams in 10 California counties

All worked with early adopters who were interested in implementing evidence-based models.

What about the other estimated 90% of child service systems who are not early adopters?
Study Design

Non-early adopting counties randomized:
- Implementation conditions (CDT or IND)
- 1 of 3 time frames (research resource issue)
- Baseline Stable Factors:
  - county size
  - use of financing
  - youth entries into residential care
  - minority status

- Dynamic Factors:
  Quantitative and qualitative measures
  * Organizational factors
  * Clinical team factors
  * Child and Family factors
8 Stages:
1. Engagement
2. Considering feasibility
3. Planning/readiness
4. Staff hired and trained
5. Fidelity monitoring process in place
6. Services and consultation begin
7. Fidelity, competence, & adherence
8. Sustainability (certification)

Involvement:
- System
- System
- System, Practitioner
- Practitioner
- Practitioner, Child/Family
- Practitioner, Child/Family
- System, Practitioner
|    | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | a | b | c | d | e | F | g | h | i | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 11 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 12 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 13 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 14 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 15 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 16 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 17 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 18 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 19 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 20 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 21 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 22 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 23 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 24 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 25 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 26 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

Black = Cohort 1, Blue = Cohort 2, Yellow = Cohort 3, Green = Ohio
Red = Discontinued; Beige Shading = Discontinue Activity
Current Status

- Days to consent (range 4 - 367 days)
  1) less than or equal to 31 days ($n = 19$ counties)
  2) between 32 and 90 days ($n = 10$ counties)
  3) between 91 and 300 days ($n = 3$ counties)
  4) greater than 300 days ($n = 3$ counties)
  5) non-consent or GT 730 days ($n = 5$ counties)
Baseline Outcomes

- Large counties consent sooner than small counties (hazard ratio: 2.60, p= .006)
- Cluster analysis allowed us to group counties into three distinct clusters which predicted rate to consent to implement:
  
1) Large population size, a high level of youth entries into residential care per capita, and a low per capita financing
2) High population, low level of youth entry into residential care per capita, and low to medium per capita financing
3) Low population size, high level of youth entries into residential care per capita and medium to high per capita financing
Higher climate and higher motivation predicted shorter response times to the invitation to consider implementing MTFC

<table>
<thead>
<tr>
<th>Covariate</th>
<th>Est.</th>
<th>HR*</th>
<th>95% CI of HR</th>
<th>S.E.</th>
<th>Est./ S.E.</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log(Population)</td>
<td>0.43</td>
<td>1.53</td>
<td>(1.13, 2.08)</td>
<td>0.16</td>
<td>2.71</td>
<td>0.007</td>
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<tr>
<td>Log (Per Capita Entries)</td>
<td>0.29</td>
<td>1.34</td>
<td>(0.73, 2.45)</td>
<td>0.31</td>
<td>0.94</td>
<td>0.350</td>
</tr>
<tr>
<td>OCS - Climate</td>
<td>0.19</td>
<td>1.20</td>
<td>(1.03, 1.40)</td>
<td>0.08</td>
<td>2.38</td>
<td>0.017</td>
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<tr>
<td>ORS - Motivation</td>
<td>0.28</td>
<td>1.32</td>
<td>(1.12, 1.55)</td>
<td>0.08</td>
<td>3.35</td>
<td>0.001</td>
</tr>
</tbody>
</table>
Thank You

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