Strategies of Intervention Development for Youth with Conduct Problems

Patricia Chamberlain, Ph.D.
FCAP, April, 2006
For additional information:

- Two websites that Patti also asked to be posted are [www.oslc.org](http://www.oslc.org) (for research information) & [www.mtfc.com](http://www.mtfc.com) (regarding implementation).
Mapping intervention targets onto ..

- Stage of development
- Known risk and protective factors
- Target group
  - Prevention (universal or targeted)
  - Treatment (single focus or multi-dimensional)

Who are the “natural” or ecologically valid change agents?
Phases of education/prevention trials

- Efficacy
- Effectiveness
- Sustainability
- Going-to-Scale
- Sustaining Systemwide
Examples of prevention interventions

• Linking Interests of families and teachers (LIFT; Universal school-based preventative intervention)
• Keeping Foster Parents Supported and Trained (KEEP; a universal intervention for 5-12 year olds in foster care)
• Early Intervention Foster Care (EIFC; a multi-component intervention for 2-7 year olds in foster care)
LIFT Intervention

Parent Training (6 sessions; tailored to age; child care provided; multiple opportunities to attend; home visits or sent materials if necessary).

Phone calls to parents

Classroom social skills program (2 lessons per week for 10 weeks)

Playground "Good Behavior Game" (group incentives for individual behavior)

Weekly newsletter

LIFT Line (phone with answering machine in classroom).
LIFT Sample Retention
(at 3rd Year Follow-Up)

84% Families participated fully.

4% Families declined participation at current wave, but agreed to continue their involvement in the future.

2% Families could not be located.

3% Families not able to fully participate due to target child’s absence from the home (runaway, living with relatives, etc.)

4% Families who retained their original status of participation in the school-related portion of the assessment. These families declined to participate in the family assessment during the original recruitment and have retained that status to date.

3% Families who have requested to be dropped completely from the study sometime between the first year and the current wave of assessment.
Cumulative Hazard of Initiating Affiliation with Misbehaving Peers

Percent of Group

Pre-treatment  5  6  7  8

Grade

Control
Intervention

Proportional Odds Ratio = 2.2
Cumulative Hazard of Initiating Marijuana Use

Percent of Group

Pre-treatment

Grade

0.0
0.5
1.0
1.5
2.0
2.5
3.0

Control

Intervention

Proportional Odds Ratio = 1.5
Cumulative Hazard of Initiating Patterned Alcohol Use

- **Control**
- **Intervention**

Proportional Odds Ratio = 1.8
Cumulative Hazard of First Arrest

Percent of Group

Pre-treatment

Months Postintervention

Control

Intervention

Proportional Odds Ratio = 2.4
Academic Progress

1st Grade (p < .01)

% Held back at Least 1 Grade at Grade 9

Intervention: 2.3  
Control: 10.5

5th Grade (n.s.)

% Held back at Least 1 Grade at Grade 12

Intervention: 12.4  
Control: 10.7
Conduct Disorder (DSM IV Criteria)

1st Grade ($p < .05$)

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Control</th>
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<tr>
<td>5.5</td>
<td>12.6</td>
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5th Grade (n.s.)

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<th>Control</th>
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<tbody>
<tr>
<td>3.6</td>
<td>2.5</td>
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Example #2
Project KEEP
Cascading Dissemination of a Foster Parent Intervention

A collaboration between the:

- San Diego Health and Human Services Agency,
- Child and Adolescent Services Research Center,
- Oregon Social Learning Center, and

funded by the National Institute of Mental Health.
The Problem

- Many of the children (ages 5-12) in foster care have significant behavior problems
- That puts them at risk for placement disruption
- It also puts foster parents at risk for dropping out from providing foster care
- What do we mean by “significant behavior problems” and how did we measure them?
Strengthening “Regular” Foster Care

Random Assignment

Children in “Regular” Foster Care from Three Oregon Counties

Enhanced Training and Support & $40 per Month (ETS)

$40 per Month (PO)

Assessment Only (AO)
Support and training for foster parents
The goals of KEEP

• To increase the parenting skills of foster and kinship parents
• To decrease the number of placement disruptions
• To improve child outcomes
• To increase the number of positive placement changes (e.g. reunification, adoption)
Project KEEP aims to accomplish these goals by--

• Promoting the idea that foster parents can serve as key agents of change for children.

• Strengthening foster parent’s confidence and skill level so that they can successfully change their own and their child’s behaviors.

• Helping foster parents use effective parent management strategies and provide them with support to do so.

• Increasing short and long term positive child outcomes in multiple domains and settings – home, school, with peers.
Who is participating in Project KEEP?

- Foster children ages 5 to 12 who are experiencing a new placement (first time or change of placement) and their foster parents.
- 640 sets of foster children/parents have been enrolled so far including:
  - 333 Experimental treatment
  - 305 Control
  - 40% are kinship homes
Race/ethnicity of participants

- Hispanic: 36%
- Caucasian: 28%
- African American: 27%
- Asian: 3%
- Native American: 1%
- Other or Multiracial: 5%
We used a “quick and dirty” measure: Parent daily report (PDR)

- PDR is collected by telephone from foster/kin parents
- Each call takes 5-10 minutes
- We collect 3 calls at baseline, another 3 calls 4 months later, and a final 3 calls 6 months after that (10 months after baseline)
- PDR produces data on the occurrence of child behavior problems and foster parent stress
Greater than 5 problem behaviors per day at baseline predicts placement disruption within the next 6 months

After 5 behaviors, every additional behavior on the PDR increases the probability of disruption by 13%
Good news: We learned that...

- foster/kin parents tolerate about as much child problem behaviors as non-system families do – 5 behaviors
- 60% of the kids in care are at or below that threshold
- PDR data is feasible to collect and is well tolerated by foster and kin parents
- PDR data tells you who to concentrate the intervention on given limited resources
What happens in the intervention?

• Foster parents are provided with general support and specific Parent Management Training methods.
• A group leader stimulates parents to generate solutions based on their experiences and on their family’s cultural individual backgrounds.
• A relationship style is modeled in the group that is readily transferable to use with children (focus on positive reinforcement).
• In-group practice of skills with guided feedback.
Two findings so far on placement outcomes

1. Children with foster parents who participated in Project Keep were less likely to disrupt.
2. Project Keep children were more likely to go home to family, relatives, or adoption.

These two outcomes taken together produced a statistically significant effect.
Percentages of Exit Type by Group

Negative Exit

Positive Exit

Intervention  Control
How do we explain this?

- Fewer child behavior problems translates into fewer placement disruptions and more successful reunifications
- Greater foster/kin parent skill translates into fewer child behavior problems
- Project Keep increases parenting skills
Total number of target child behaviors at termination (by number of behaviors at baseline averaged across calls).

<table>
<thead>
<tr>
<th>Behavior Range</th>
<th>Control Children</th>
<th>Treatment Children</th>
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<tbody>
<tr>
<td>&lt; 4 behaviors at baseline</td>
<td>2.6</td>
<td>2.1</td>
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<tr>
<td>4 - 7 behaviors at baseline</td>
<td>5.2</td>
<td>3.7 *</td>
</tr>
<tr>
<td>&gt;7 behaviors at baseline</td>
<td>8.3</td>
<td>7.5</td>
</tr>
</tbody>
</table>

* p < .05 two-tailed

Control Children at baseline: n = 159
Treatment Children at baseline: n = 94
Control Children at termination: n = 93
Treatment Children at termination: n = 93
What are other possible effects?

A study in Oregon found that a higher foster parent retention rate (fewer drop outs) was related to fewer placement disruptions – we will examine this in San Diego.

Preliminary data show that parenting practices in Keep families are changing in positive ways.
What are we doing different in Keep than in your standard training?

• Use a standardized measure (PDR) to repeatedly assess the behavior problems. This helps understand challenges to F/kin parents and tailor the intervention to be relevant (80-90% attendance rates at weekly meetings).

• Weekly support and training in behavior management. Relates problems the foster/kin parents are having in their homes.

• Foster /kin parents get $15/week to cover expenses plus day care and snacks
Conclusions

- Preliminary data suggests KEEP group participation increase foster and kin parent skills
- Increased parent skills translate into lower rates of child problem behaviors
- Lower rates of child problem behaviors translate into fewer placement disruptions & more frequent placement transitions to family/relative care
Example #3

• Identifying a subset of youngsters who seem to be at particularly high risk at a specific time...

• The transition to middle school for girls in foster care
Early research on girls …

• First study showed that there were gender differences in process but not in outcomes (arrest rates, self-reported delinquency, program completion rates)

Differences in process for girls and boys

Chamberlain & Reid, 1994
Characteristics of Girls: Family History

- 17 transitions in parent figures (6 before age 13)
- 2.8 prior out-of-home placements (vs. 1.3)
- 74% had at least one parent convicted of a crime (vs. 41%)
- 93% have a history of documented physical or sexual abuse
- 79% have witnessed domestic violence
Co-occurring Problems

- 74% had clinical or borderline internalizing
- 57% report at least one attempted suicide
- 49% used marijuana daily to weekly
- 36% used hard drugs daily to weekly
- 38% had sex with someone known < 24 hrs
- 29% had sex with drug injector
Family Chaos and Abuse

- 17 transitions in parent figures (6 before age 13)
- 2.8 prior out-of-home placements
- 74% had at least one parent convicted of a crime
- 93% have a history of documented physical or sexual abuse
- 79% have witnessed domestic violence
## What Predicts Age of First Arrest?

<table>
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<th>Predictor</th>
<th>Coefficient</th>
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<td>Girl age</td>
<td>0.17</td>
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<tr>
<td>Menstrual onset</td>
<td>0.11</td>
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<tr>
<td>IQ</td>
<td>0.21+</td>
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<tr>
<td>ADHD</td>
<td>0.00</td>
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<tr>
<td>Severe punishment</td>
<td>0.00</td>
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<tr>
<td>Sexual abuse</td>
<td>-0.05</td>
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<tr>
<td>Parental transitions</td>
<td>-0.42**</td>
</tr>
<tr>
<td>Biological parent criminality</td>
<td>-0.28*</td>
</tr>
</tbody>
</table>

\[ R^2 = 0.52^{***} \quad F(8, 45) = 5.98, \ p < .0005. \]

*Leve & Chamberlain (2004), J of Child and Family Studies*
Risk factors for girls include:

- Transitions in parenting figures
- Abuse
- Parental criminality
- The transition to middle school
Intervention Services

Modified MTFC preventive intervention:

- Girls in foster care (n = 100)
- Services begins prior to middle school
- 6 intensive sessions for foster parents
- 6 intensive sessions for girls
- 6th grade: weekly skills-training for girls
- 6th grade: weekly FP meetings
Why is Early Arrest Important?

Girls who were first arrested before age 12...

- Had significantly more participation in health-risking sexual behavior
- Had significantly more self-reported delinquent acts by age 16
- Had an increased likelihood of unplanned pregnancy and of becoming teen mothers
- (Did not have an increased risk of substance use or of depression in our study)
Example #4 EIFC
(AKA MTFC-P)
4 Reasons for Early Intervention

- Prevalence of psychosocial/developmental problems in young CWS children
- Stability of high-risk trajectories into adolescence
- Negative effects of early stress on the brain
- Neural plasticity in response to intervention
Tipping Points

Preschool as a *critical period* for subsequent outcomes
Prevalence of Problems

- Over 500,000 children in foster care in the U.S.

- In the U.S., through the 1990’s, the number of foster children under age five increased at twice the rate nationally of the general foster care population (Goerge & Wulczyn, 1998; U.S. GAO, 1994).

- Currently, children under 6 represent one third of the U.S. foster care population

- Klee et al. (1997): Over 80% of children in this age group have developmental or emotional problems; over 50% exhibited problems in both areas.
Stability of Problems

- Up to 50% of foster children have symptoms of psychological disorders (e.g., Glisson, 1994, 1996; Horowitz, Simms, & Farrington, 1994; Stein, Evans, Mazumdar, & Rae-Grant, 1996; Trupin, Tarico, Benson, Jemelka, & McClellan, 1993).

- McIntyre and Keesler (1986): Nearly nine times the relative risk of psychopathology, and specific syndromes are between 2 and 32 times more likely.
Early Stress Effects on the Brain
Intellectual Development: Foster vs. Community Children

Mean WPPSI Scores by Group

Mean NEPSY Scores by Group

Mean Core Domain Scores (M=100, SD = 15)

Mean Summary Scores for Language and Executive Function by Group

(Pears & Fisher, 2005)
Physical Development: Foster vs. Community Children

Mean Z-Scores

- Height for age: Foster care -0.34, Community 0.36
- Head circumference: Foster care -0.13, Community 0.68
- Weight for height: Foster care 0.74, Community 0.72

*** n.s.  

(Pears & Fisher, 2005)
Neural Plasticity

- Many systems maintain plasticity over the course of development
- May be possible to reverse effects of early stress on the brain through interventions
- *BUT* plasticity narrows with age, so intervene early
Effective Strategies are Needed...

- To identify children’s needs
- To reduce risk
- To promote healthy development and
- To support and retain foster parents
The Oregon MTFC Model

- **Objective:** To change the negative trajectory of antisocial behavior by improving social adjustment with family members and peers through simultaneous and well-coordinated treatments in the home, school, & community.

- Treatment is provided in a family setting where new skills can be practiced and reinforced.
MTFC Family of Programs

- MTFC-P (preschoolers)
- Multidimensional Treatment Foster Care (MTFC-A)
- MTFC-L (latency aged children)
Multidimensional Treatment Foster Care - for Preschoolers (MTFC-P)

Psychopathology Model

Developmental Model

Little Delinquents

Big Toddlers
MTFC-P Basic Concept
MTFC-P Program Goals

- 4 areas of emphasis for MTFC-P
  - Support and encourage positive behavior
  - Clear and consistent limits
  - Responsiveness to child’s cues and needs
  - Close supervision of the child

- Focus is on key developmental tasks for preschoolers
  - Self-regulation
  - Relationships with caregivers
  - Peer relations
  - School readiness
MTFC-P Emphasizes 3 Domains:

- Foster Parent Consultant
  - Family Therapist
  - ‘Daily Report’ Caller

- STAFF
  - Case Manager
  - Child Therapist
  - Behavioral Skills Trainer
  - Child Psychiatrist

- Caregiver-Child Relationship
- Case Management
- Child Needs

Contexts
- Home
- Community
- Preschool/school
4 Key Program Components

- Foster parent support & consultation services
- Child treatment services
- Parenting support for birth/adoptive families
- Daily Report telephone check-in w/caregiver
Foster Parent Support

Central concept: Foster parents as members of the treatment team

- 12 hours pre-service training course
- Ongoing consultation with program staff
- Weekly support and training meetings
- 24-hour, 7-day on call staff member
- Emergency crisis intervention
- Respite
Support and Training for Foster Parents

Bar chart showing a comparison between Failed placements and Foster Parent Drop Outs, with a significant increase in percentage for Enhanced Foster Care compared to Regular Foster Care.
Resources for Children

- Individual therapy/skills training
- Therapeutic playgroup to promote school readiness
- Psychiatric medication management
- School/preschool consultation
- Referral for services to address special needs (e.g. developmental delays, dental, medical)
Parenting Support for Birth/Adoptive Families

- Weekly family counseling focusing on Parent Management Training
- Instruction in behavior management methods
- Home visits with crisis back-up: Start small increase over time...
- Case management: Service coordination, access, utilization
- 24-hour, 7-day on call to case manager
- Aftercare
Daily Report Telephone Check-In

- 5-10 minute telephone call
- Behavior checklist format
  - 0 = behavior did not occur
  - 1 = behavior occurred, was not stressful
  - 2 = behavior occurred, was stressful
- Web-based, housed on OSLC server as WebPDR
  - Data entry, management, and analysis all online
  - Facilitates off-site consultation
Program Staffing Structure

Central Concept: Roles are stratified

- Program Supervisor
- Foster Parent Consultant
- Child Therapist/Skills Trainer
- Playgroup teachers
- Family Therapist
- ‘Parent Daily Report’ Caller
- Consulting Psychiatrist
EIIFC Research

Pilot Evaluation, 1998-9
(n’s: 10 MTFC-P, 10 RFC, 10 CC)

Randomized Efficacy Trial 1999-2004
• Total of 177 children
  • 60 EIFC, 57 Regular FC, 60 Community Comparison (CC)
• 24 month assessment protocol, 1-3 month assessment intervals
• All children between 3-6 years old at entry, and not in 1st grade
• Foster children entering a new placement

Transitions Study 2005-2010
• Ongoing study of sample through middle childhood
• 3 follow-up waves of data collection
• Behavioral, neurobiological, and economic measures
Why love is not enough:

- neglect/inadequate parenting
- rejection by peers/school failure
- in utero exposure to drugs and alcohol
- termination of parental rights
- chronic victimization
- rejection by parents
- no idea what are typical family expectations
- chaos
- physical/sexual abuse
- antisocial behavior/delinquency
- lack of trust
- history of failure
Basic Approach

• Facilitating a balance encouragement and limit setting

• Treatment team concept

• Consistency across settings in which the child exists
Placement outcomes, EIFC vs. regular foster care

Figure 3. Survival Functions by Condition

Survival Functions by Condition

Cum Survival

Condition

FCI
FCI-censored
FCC
FCC-censored

Time in perm placement

Prior out-of-home placements effects on permanent placement failures,

Figure 3. Probability of failed subsequent placements by condition.
MTFC was developed for Treatment Populations

- Boys referred from juvenile justice*
- Girls referred from juvenile justice*
- Children leaving Oregon State Hospital*
- Children referred from managed care mental health
- “Challenging” children in foster care*
- Adolescents with low cognitive functioning

* Randomized trials have been conducted
Multidimensional Treatment Foster Care (MTFC)

- For children and adolescents placed in out-of-home care
- Youth are placed singly in intensively trained and supervised community foster homes that are contacted daily and supported 24/7 for 6–9 mo.
- Interventions are implemented using multiple methods (e.g., family and individual therapy, skill training, academic supports) in key settings
- Program supervisors carry a caseload of 10, supervise foster parents, therapists, & skills trainers, and work with parole/probation officers
- Youth attend public schools
History of Oregon MTFC

• In 1983, the MTFC model was developed for adolescents referred from Juvenile Justice as an alternative to residential treatment/incarceration
• MTFC used to treat:
  – chronically delinquent male & female youth
  – severely emotionally and behaviorally troubled children and youth, ages 3 through 18
  – youth with developmental delays and sexual acting-out behaviors
  – difficult to treat youth with histories of multiple failed placements
• Many studies have been conducted on the efficacy of MTFC – more are currently underway
The Multidimensional Treatment Foster Care (MTFC) Model

MTFC

Community Programs

- Ongoing State & Community Contracts
  (Program, Individual, Consultation/Training)

  - Juvenile Justice: DYA & Lane Co.
  - Child Welfare
  - Developmental Disabilities
  - Mental Health
  - KITS

Research

- NIMH/NIDA Studies
  (7 Randomized Trials: 3 Current)

  - Cascading Dissemination

  - Girls referred from Juvenile Justice
  - Middle School Girls

Dissemination

- TFC Inc.
  (Sites in U.S., U.K., Canada, and Sweden)

- 35 Current U.S. Sites
The MTFC Model

- **Objective:** To change the negative trajectory of antisocial behavior by improving social adjustment with family members and peers through simultaneous and well-coordinated treatments in the home, school, & community.

- Treatment is provided in a family setting where new skills can be practiced and reinforced.
MTFC program goals

• 4 areas of emphasis for TFC
  – Support and encourage positive behavior
  – Clear and consistent limits
  – Responsiveness to child’s cues and needs
  – Close supervision of the child

• Focus is on key competencies
  – Self-regulation
  – Relationships with caregivers
  – Peer relations
  – School performance
MTFC Effects for Boys referred from Juvenile Justice

MTFC (versus Group Care) Boys

- More time in program/fewer runaways
- Less time in “locked” incarceration in follow-up
- Fewer criminal offenses (½ the rate of GC boys)
- Less likely to commit violent crimes 2 years later
- Delinquency effects mediated by:
  - Supervision
  - Relationship with a mentoring adult
  - Consistent non-harsh discipline
  - Less association with delinquent peers

What does the MTFC model look like for adolescents?

Focuses on increasing youth competencies and positive relationships with adults and peers and on decreasing externalizing and internalizing behavior problems.
Core Components for Youth

- One youth is placed in each MTFC home
- Provided with daily structure and support by MTFC parents who use a behavior management level system
- Includes a daily school card
- Weekly individual therapy
- Weekly skill building & advocacy
- Close supervision of whereabouts and associations
- Psychiatric consultation as needed
- Daily mentoring by MTFC parents
- Weekly contact w/ parents and frequent home visits
Core Components for MTFC Foster Parents

- Conduct daily behavior management point and level system
- Receive daily telephone contact and data collection (M-F using PDR)
- Attend weekly support and training meetings
- Have 24-hour, 7-day on call access to their program supervisor
- Emergency crisis intervention
- Respite
- 20 hours of pre-service training
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**Note:**
- **EVENT NOTE 1:** took away points for not doing dishes when asked
- **EVENT NOTE 1:** George ran away to the zoo today.
- **EVENT NOTE 1:** Yellow hat man was at conference - George in respite care.
<table>
<thead>
<tr>
<th>Behavior Date</th>
<th>Occurred: Not Stressful</th>
<th>Occurred: Stressful</th>
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<td>6/15/03</td>
<td>Arguing, Backtalking, Destructiveness, Irresponsibility, Runaway, ShortAttention, Teasing, Truancy</td>
<td>Complaining, Daydreaming, NotMinding, StayingOut</td>
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<td>6/14/03</td>
<td>Arguing, Backtalking, Defiance, Depression, Irresponsibility, Lying, StayingOut</td>
<td>Daydreaming, Destructiveness, NotMinding</td>
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Youth Behavior & Parent Stress Level Over Time

Brandon's PDR

Youth Behavior & Parent Stress Level Over Time

Brandon's PDR
Core Program Components for Families

• Weekly family therapy focused on Parent Management Training
• Instruction in behavior management methods
• Frequent home visits with crisis back-up
• 24-hour, 7-day on call access to their program supervisor
• Aftercare parent group
Staff Role Descriptions

- Treatment Foster Parents
- Program Supervisor (1.0 FTE)
- Family therapist (.50 FTE)
- Youth therapist (.50 FTE)
- Skill trainer (hourly)
- PDR caller/Foster parent recruiter (1.0 FTE)
- Consulting psychiatrist (hourly)
- Clinical supervisor/Program director
The Treatment Foster Care Model

- School
- Child
- Child Therapist
- Program Supervisor
- Juvenile Parole/Probation
- Foster Parents
- Natural Family
- Natural Family Therapists
Level System for Adolescents

- Three levels
- Opportunities to earn points for compliance, prosocial behavior
- Strong emphasis on positive reinforcement
- Points are lost for rule violations, misbehavior
- Provides a framework within which discipline can occur without engaging in
<table>
<thead>
<tr>
<th>Name</th>
<th>Points</th>
<th>Things to Do to Earn Points</th>
<th>Earned</th>
<th>Bonus</th>
<th>Taken</th>
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<td>GO TO SCHOOL</td>
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<td>BEHAVIOR IN CLASS</td>
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<tr>
<td></td>
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<td>SCHOOL CARD BONUS</td>
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<td>READ AND STUDY</td>
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<tr>
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<td>10</td>
<td>CHORE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 A.M.</td>
<td>ATTITUDE/MATURITY</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>15 P.M.</td>
<td>ATTITUDE/MATURITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2-10</td>
<td>VOLUNTEERING</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>BED ON TIME</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>DAILY TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>COMMENTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Level II Privileges

<table>
<thead>
<tr>
<th>PRIVILEGE</th>
<th>DESCRIPTION</th>
<th>POINT COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASICS</td>
<td>Use of telephone for 15 minutes daily, radio in your room. 9:30 P.M. Bedtime</td>
<td>350</td>
</tr>
<tr>
<td>TV</td>
<td>Can watch TV after homework and/or chore(s) are completed</td>
<td>100</td>
</tr>
<tr>
<td>LATER BEDTIME</td>
<td>10:00 P.M. Bedtime Daily, 11:00 P.M. Bedtime on non-school days and holidays with permission.</td>
<td>100</td>
</tr>
<tr>
<td>ACTIVITY TIME</td>
<td>With prior planning, permission and approval, you may plan to go skating, swimming, to a movie, school activity, etc. If you are late or not where you said you would be, you will lose 1 point per minute.</td>
<td>½ point per minute</td>
</tr>
<tr>
<td>BONDS</td>
<td>1 Bond costs 100 points. You need 6 bond to buy Level III.</td>
<td>50 each</td>
</tr>
<tr>
<td>EXTRA PHONE TIME</td>
<td>One 20 minute call (not long distance)</td>
<td>25</td>
</tr>
<tr>
<td>OTHER</td>
<td>Foster Parents will choose if applicable</td>
<td>50</td>
</tr>
<tr>
<td>ALLOWANCE</td>
<td>$5.00 per week. All purchases must have receipts and you must show your money to your foster parents. Money spent at school in pop/candy machines must have Case Manager approval.</td>
<td>200</td>
</tr>
</tbody>
</table>
Data from Juvenile Justice Studies

First the boys…
Study Design and Time Line

**Pre-placement**
- Referral by DYS
- Random assignment to MTFC or GC
- Obtain parental consent
- Baseline assessment

**Placement in MTFC or GC**
- Assessment of mediating variables

**6 months**
- Assessment of outcomes

**12 months**
- Assessment of outcomes

**18 months**
- Assessment of outcomes

**24 months**
- Assessment of outcomes
Outcomes: Criminal Referrals

Mean Criminal Referrals Per Year

![Bar chart showing the mean criminal referrals per year for Group Care and MTFC. The chart compares 1 year pre and Tx + 1 year.]
Supervision \( \rightarrow \) Mediators \( \rightarrow \) Antisocial Behavior
Discipline \( \rightarrow \) Mediators
Adult-Youth Relationship \( \rightarrow \) Mediators
Association with deviant peers \( \rightarrow \) Mediators
Group \( \rightarrow \) Antisocial Behavior

\( r = .88^{***} \)

\( r = .85 \)

\( r = .61 \)

\( r = .80 \)

\( r = .45 \)

\( r = -.64^{**} \)
## Number of Criminal Referrals for Violent Offenses by Treatment Condition

<table>
<thead>
<tr>
<th>Criminal Referrals for Violent Offenses</th>
<th>GC</th>
<th>MTFC</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Referrals</td>
<td>62%</td>
<td>78%</td>
</tr>
<tr>
<td>1 Referral</td>
<td>14%</td>
<td>16%</td>
</tr>
<tr>
<td>2+ Referral</td>
<td>24%</td>
<td>5%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
What Services do Delinquent Girls Typically Receive?

Group Care (GC):
- Placement with 3–15 other youth and a shift staff
- Based on positive peer culture theory
- Most have “in house” schools
- Most provide individual therapy
- Some have family therapy
- Treatment typically lasts 3–9 months
An Alternative: Multidimensional Treatment Foster Care (MTFC)

- For youth placed in out-of-home care
- Youth are placed singly in intensively trained and supervised community foster homes that are contacted daily and supported 24/7 for 6–9 mo.
- Interventions are implemented using multiple methods (e.g., family and individual therapy, skill training, academic supports) in key settings
- Program supervisors carry a caseload of 10, supervise foster parents, therapists, & skills trainers, and work with parole/probation officers
- Youth attend public schools
Treatment Components

- Close supervision of youth
- Consistent, clear limits and consequences for rule violations, substance use, and antisocial behavior (non-harsh discipline)
- Limited access to delinquent peers
- Supportive daily relationship with a mentoring adult
- Encouragement/reinforcement for appropriate behavior and attitudes; building on competencies (motivational interviewing)
- Increase aftercare parents’ skills at supervision, limit setting, and reinforcement
Girls Study Design

• 90 girls aged 13–17 recruited through the juvenile justice system

• All youth had at least one criminal referral in prior 12-months, and were court-mandated to an out-of-home treatment placement

• Random assignment into Group Care (GC) or MTFC ($n = 81$)

• Intervention lasted for approximately 6 months following baseline
Randomization and Assessment Timeline

- Random assignment
- Baseline assessment
- Placement

Each participant had at least one criminal offense.

81

12-month follow-up assessment of outcomes

GC

3- & 6-month in-placement assessment of mediating variables

MTFC
24-month locked settings outcomes

Mean number of days in locked settings

Intervention group

- GC
  - 12 months pre-treatment: 57
  - 12 months post-treatment: 72
  - 24 months post-treatment: 90

- MTFC
  - 12 months pre-treatment: 22
  - 12 months post-treatment: 20
  - 24 months post-treatment: 42

12 months pre-treatment
12 months post-treatment
24 months post-treatment
24-month arrest outcomes

Mean number of arrests

<table>
<thead>
<tr>
<th></th>
<th>12 months pre-treatment entry</th>
<th>12 months post-treatment entry</th>
<th>24 months post-treatment entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>GC</td>
<td>4.5</td>
<td>2.7</td>
<td>1.3</td>
</tr>
<tr>
<td>MTFC</td>
<td>5.2</td>
<td>1.5</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Intervention group

- GC: Group C
- MTFC: Multifamily Therapy for Children

Data indicates a significant decrease in arrests post-treatment entry, with MTFC showing the greatest reduction in arrests compared to GC.
12-month homework outcomes

Mean number of days/week spent on homework*

<table>
<thead>
<tr>
<th>Intervention group</th>
<th>Caregiver report</th>
<th>Youth self-report</th>
</tr>
</thead>
<tbody>
<tr>
<td>GC</td>
<td>2.3</td>
<td>2.1</td>
</tr>
<tr>
<td>MTFC</td>
<td>3.3</td>
<td>3.7</td>
</tr>
</tbody>
</table>

* Caregiver report
Youth self-report
Association with Deviant Peers

Intervention Effects on Delinquent Peer Association

Chi-Square=4.488, df=5, p=.482, cfi=1.000, RMSEA=.000

Leve & Chamberlain, 2005, J of Abnormal Child Psychology
Deviant Peers as a Mediator

Chi-Square=6.824, df=7, p=.447, cfi=1.000, RMSEA=.000
Engagement in Health-Risking Sexual Behavior in Prior 12 Months

- 89% Had sexual intercourse at least once
- 38% Had sex with someone known < 24 hrs
- 29% Had sex with someone who injects drugs
- 31% “Never” or “rarely” used safe sex practices
- 48% Had sex with three or more partners in 12 months

Alpha = .79
Current NIDA Intervention Targets Comorbid Behaviors

- Augment MTFC for girls with new, additional components
  - Virtual Date-sexual coercion
  - Community Reinforcement with Vouchers
  - Motivational Interviewing
  - Foster Parent Training/Planned Parenthood
  - Skills Trainer Training
  - Women In Transition Group (increase knowledge, planning, stress management)
Some of the key clinical issues for adults

- Bonding and limit setting
- Living w/relational aggression
- Paying attention at the right time (not at the wrong time)

- Promoting emotional regulation
- The safety “frame”
- Burn out
- Encouraging community engagement and independence
Insert SRA slide
MTFC Case Example

Misty
Misty

- 16 years old
- First contact with juvenile justice at age 10
- By age 14, 10 offenses & 3 detention stays
- Explosive temper
- Physical outbursts
- Loud, offensive verbal attacks
- Expelled from public school
Family & Community Context

- Biological mother, mentally ill
- Biological father out of the picture
- Maternal grandmother, limited reading/writing skills
- Immediate & extended family involvement in criminal justice system
- Rural community
- Very limited resources
- History of attention for antisocial behavior
Matching & Placement

• Characteristics of MTFC home
  – High level of supervision, flexibility

• Clear expectations presented at placement meeting
  – Point & Level system
  – School placement & school card
  – Clothing
  – Music
Level I

• Behavioral targets
  – Coping positively with stress
  – School involvement
    • Attendance
    • Positive behavior

• Areas of strength
  – Good with young children
  – Desire to please foster parents
Level II

• School involvement
  – Attendance
  – Positive behavior
  – Adult & peer relations
• Not pushing limits
• Positive talk
Individual Therapy

- Problem-solving, reducing impulsivity
- Emotion regulation
- Stress management, positive coping
- Asking for help
Skills Training

• Development of age-appropriate, pro-social interests
  – Reading
  – Crafts
  – Exploring the community

• Pro-social interactions
  – Peers
  – Adults
  – Community members
Family Therapy

- Engaging grandmother
- Parenting strategies
  - Discipline, encouragement
  - Supervision
  - Decreased association with delinquent peers
- Assisting in decreasing family volatility, reactivity
- Parent-child boundaries
Interventions: Family

• Simplified, visual presentation of MTFC program
  – Point & Level System
  – Video-tapes of parenting strategies
  – Role-plays

• Developing positive perspective, hope for Missy’s future

• Reinforcing attending appointments
Interventions: Misty

• Inappropriate language
  – School
  – Exaggerated, overly negative descriptions of experiences

• Developing a “thick skin”
  – Framed as being very sensitive
  – Identified need to be less affected by negative people
Interventions: Misty

• Skills trainer
  – “Supportive” phone calls

• Individual therapist
  – Reprimanded by program supervisor
Level III

- Reinforced strengths
- Employment
- Emphasis on positive behavior at school, community
  - Expressing self in socially acceptable ways during times of stress
Home Visits & Reunification

• Began slowly
• Emphasis on:
  – Supervision
  – Discipline (balancing reinforcement & limit-setting)
• Family/extended family relationships
  – Co-offending cousin on property
  – Relationship with mother, grandmother
• Positive community involvement
Some of the Key Components to Interventions for Girls

- First and foremost—stabilization and safety at home and at school
- To gain an understanding of past experiences that allows for healthier current and future adjustment
- To learn skills to interact with adults and peers without undermining key supportive relationships
- To develop a plan for the future and to practice skills that will help to realize that plan
- To identify behaviors and attitudes that could “sink” the plan
- Focus on building supportive female friendships
Risk factors for girls include:

- Transitions in parenting figures
- Abuse
- Parental criminality
- The transition to middle school
Intervention Services

Modified MTFC preventive intervention:

- Girls in foster care (n = 100)
- Services begins prior to middle school
- 6 intensive sessions for foster parents
- 6 intensive sessions for girls
- 6th grade: weekly skills-training for girls
- 6th grade: weekly FP meetings
MFTC in NYC

A qualitative study of MFTC implementation funded by NIJ

Peter Sprengelmeyer
Patricia Chamberlain
Theoretical model

Initial Characteristics

Fidelity of MTFC Program
- weekly foster parent meetings
- weekly clinical staff meetings
- PDR
- Point/level system
- School cards
- Lack of off model interventions

Outcomes
- Arrests
- Return to system
- Placements
Method

- Working with Cayuga Home for Children-Bronx
- Three clinical teams
- Currently have 25 placements
- Collecting qualitative interview data from all clinical staff members and foster parents
- Staff members also completing survey regarding attitudes toward EBP’s
- Using data from dissemination measures (weekly fidelity ratings from consultants, PDR, fidelity ratings from taped meetings)
- OCFS in New York is sharing outcome data (e.g., Re-arrests, placements), evaluated in-house and results are shared.