


**Youth
VILLAGES**

Staying the Course: Correlates and Effects of Therapist Adherence to the Multisystemic Therapy Model

*Presented at the 17th Annual Systems of Care Conference
March 2, 2004 Tampa, Florida*

Youth Villages' History

- Created in 1986 with the merger of Dogwood Village and Memphis Boys Town
- Adopted Multisystemic Therapy as the primary treatment model for in-home services in 1994
- Currently providing Intercept to over 650 children in five states

www.youthvillages.org 

Youth Villages'...


Services include:

- Intensive in-home counseling
- Residential treatment
- Intensive residential treatment
- Therapeutic foster care
- An emergency shelter
- Group homes
- Adoption services
- Family based alternatives for children with developmental disabilities
- Specialized crisis services

www.youthvillages.org 


Therapist Adherence

“ . . . The mutual engagement of the family and therapist in goal-setting, assessment, and intervention activities that leverage strengths to change the behaviors and interaction patterns among individuals and systems in the youth's ecology linked with the youth's referral problems.”¹

See Reference List in Handout. 


Therapist Adherence

- Caregiver reports of therapist adherence to MST model linked to both intermediary (family functioning, parental supervision, etc.) and outcome (youth arrest, out-of-home placement) variables in several studies²⁻⁵.
- Report on Washington State's implementation of other "research-based" programs indicated that poorly delivered programs cost more and actually had detrimental effects on youth⁶.
- Recent evidence from MST Transportability Study points to the importance of therapist adherence in achieving good outcomes for children and families¹.

See Reference List in Handout. 

The Prevention Project

- Funded through LeBonheur Health Systems Foundation
- Purpose – determine efficacy and cost effectiveness of providing MST to children at risk of out-of-home placement in state or juvenile justice custody
- 240 children randomized to two groups – MST Group and Best Practices Group
- Referrals from juvenile justice system, schools, Community Service Agency (affiliated with the state child welfare agency), and self-referred



The Prevention Project - Data

- Intake and Six Month – information gathered in face-to-face interview with family by research staff (Six Month Response Rate – 94.6%)
- Included data on child and family demographic characteristics, family income and education level, previous history of mental health issues/substance abuse/violence/legal trouble in the family and child
- Standardized assessments included Child Behavior Check List (CBCL)¹⁷, Youth Self Report (YSR)¹⁷, Child and Family Assessment Scale (CAFAS)⁸, Self Report Delinquency Scale (SRDS)⁹, and Brief Symptom Inventory (BSI)¹⁰
- Primary data gathered from Juvenile Court at twelve months including custody, charges, disposition of charges, and placement of youth in juvenile justice facility

See Reference List in Handout.



Therapist Adherence Measure (TAM)

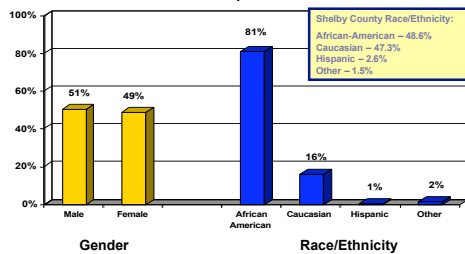
- For participants receiving MST services, a phone interview was conducted by research staff with caregivers two weeks after initiation of treatment and monthly thereafter until discharge from treatment
- Response rates:
 - All clients who received MST services had at least one TAM measure
 - 78.8% of scheduled TAM measures were completed
- Twenty-six items rated aspects of the therapist's activities with the family on a five-point Likert scale
- Original TAM contained six factors covering different aspects of adherence to the model
- Recent work by Schoenwald, et al distilled the TAM to a single-factor score using 15 items¹

See Reference List in Handout.



Prevention Project – MST Group Demographics

N = 118

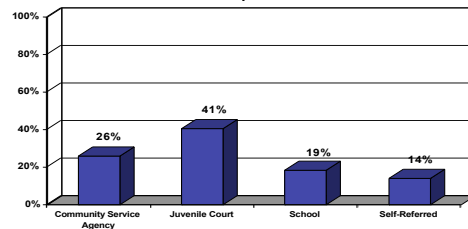


Mean Age at Admission – 12.87 Years,
 SD = 2.48, Range = 3.94 to 16.25 Years



Prevention Project – MST Group Referral Source

N = 118



Findings – Correlates of Adherence

Adherence levels were divided into tertiles – highest and lowest tertiles were compared.

- Therapist adherence was higher for African American youth than for Caucasian participants – $t(113) = 1.99, p = .049$
- Families with income less than \$20,000 reported greater adherence – $t(109.9) = 2.15, p = .034$
- Clients referred from Juvenile Court and CSA reported higher adherence than referrals from other sources – $F(3.117) = 4.77, p = .004$
- Clients with oppositional behavior as primary referral problem reported lower levels of adherence than those referred for other reasons – $t(116) = 1.72, p = .089$



Findings – Correlates of Adherence (cont.)

- Families with prior DCS contact reported higher levels of adherence – $t(77.8) = 2.84, p = .006$
- Higher adherence was reported by families of children whose mother had a history of substance abuse – $t(59.8) = 2.28, p = .026$
- Lower levels of adherence were reported by families whose child had run away at least one time in the past – $t(79.2) = 1.8, p = .081$
- Higher levels of adherence were reported by families of children whose friends had a history of alcohol and drug use – $t(99) = 1.99, p = .050$
- Families of children with unsatisfactory conduct grades reported higher therapist adherence – $t(63.5) = 2.71, p = .009$



Findings – Correlates of Adherence (cont.)

Relationship between therapist adherence level and the match between client and therapist demographic characteristics was examined.

- No differences were found between clients who were the same gender as their therapist and those who were not – $t(116) = .408, p = .684$
- No differences were found between clients who were and were not matched on race/ethnicity – $t(116) = .082, p = .935$



Findings – Effects of Adherence

Children whose therapists were highly adherent to MST showed significant improvement in the following CBCL Measures:

- School competence – $F(1, 67) = 4.90, p = .03$
- Delinquency – $F(1, 72) = 6.35, p = .014$
- Total Problems – $F(1, 72) = 2.94, p = .091$

Significant improvement on the YSR was associated with higher levels of adherence in the following areas:

- Aggressive Behavior – $F(1, 62) = 46.26, p = .015$
- Externalizing Problems – $F(1, 62) = 5.73, p = .02$
- Activities Competence – $F(1, 62) = 2.83, p = .097$
- School Competence – $F(1, 60) = 3.82, p = .056$



Findings – Effects of Adherence (cont.)

- Children who had a highly adherent therapist demonstrated greater improvement in Total Score on the CAFAS – $F(1, 68) = 2.83, p = .033$
- On the BSI, higher levels of therapist adherence were associated with marginally greater level of improvement in phobic anxiety – $F(1, 71) = 3.12, p = .082$
- Changes in SRDS scores did not differ significantly by therapist adherence level.



Findings – Effects of Adherence (cont.)

Contact with Juvenile Court
Between Baseline and 12-Months by Adherence Level.

Group	Contact with Juvenile Court		
	Yes	No	Total
Low Adherence	16	23	39
High Adherence	14	25	39
Total	30	48	78

$\chi^2(1) = .217, p = .642$



Findings – Effects of Adherence (cont.)

Out-of-Home Placement
Between Baseline and 12-Months by Adherence Level.

Group	Placed outside of the home		
	Yes	No	Total
Low Adherence	12	27	39
High Adherence	9	30	39
Total	21	57	78

$\chi^2(1) = .586, p = .444$



Findings – Effects of Adherence (cont.)

Change in Custody
Between Baseline and 12-Months by Adherence Level.

Group	Change in custody		
	Yes	No	Total
Low Adherence	3	36	39
High Adherence	0	39	39
Total	3	75	78

$p = .240$ (Based on Fisher's Exact Test).



Discussion

- Evidence provided that some client and family characteristics, including demographics, presenting issues, school functioning, and family's social history may influence the level of adherence to MST principles demonstrated by a therapist.
- No evidence found that match between client and therapist on gender or race/ethnicity affects level of adherence to the treatment model
- Consistent with other studies, improvement in functioning as demonstrated by standardized measures significantly differed by level of therapist adherence, although not on all measures.
- Level of therapist adherence was not significantly associated with juvenile court outcomes



Next Steps

- **Explore the relationship between level of therapist adherence and child/family characteristics further –**
 - Does level of adherence vary between families for the same therapist?
 - Does therapist level of education and/or experience affect level of adherence?
 - Is there an interaction between therapist characteristics and child/family characteristics that influences the level of adherence?
- **Continue to examine the effects of level of adherence on outcome measures –**
 - Do the differences seen at six months also appear at 12 and 24 months?
 - Are there school outcome measures which vary by therapist adherence level?



For Further Information:

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