

Multi-level Influences on MST Implementation & Outcomes in Transportability Sites

Sonja K. Schoenwald, Ph.D.
Associate Professor
Medical University of South Carolina
Family Services Research Center
Department of Psychiatry & Behavioral Sciences
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Dr. Schoenwald is a stakeholder and Board member of MST Services, LLC, the university-licensed technology transfer company that implements the MST training and quality assurance protocol to MST programs.

Community-Based Implementation and Outcomes of MST



Transportability of Evidence-Based Treatments: MST as a Test Case

Schoenwald, PI

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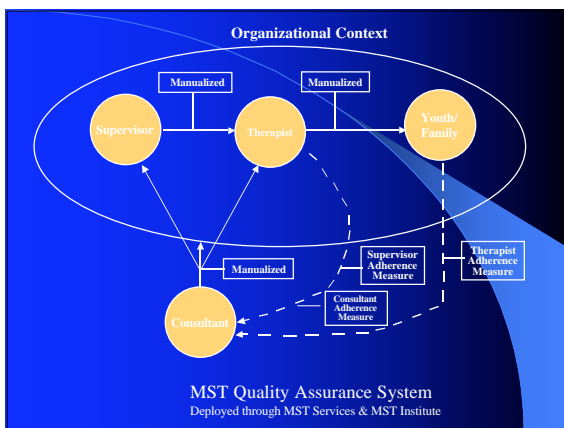


MST Transport Strategies

- To combat vulnerability to adaptation:
 - * Treatment, supervision, & consultation manuals
 - Ongoing MST training and clinical consultation
- To minimize likelihood of rejection:
 - * Mutual “fit” assessment *precedes* implementation and is ongoing

MST Transport Strategies (2)

- To engage extra-organizational influences on fidelity & effectiveness
 - * Site assessment process includes referral & reimbursement agencies, influential groups
 - * Semi-annual review of process and outcomes addresses extra-organizational factors
 - * Impact of extra-organizational influences assessed & addressed on a *case by case* basis by consultant, supervisor, therapists



Youth Participants

- 1950 youth
- 15.5 years old, 65% male, 58% Caucasian, 19% African American, 6% Asian, 4% Hispanic, 13% biracial or other
- 69% one bio parent (alone or with other)
- 18% both bio parents 50% less than 20k/yr

Therapists and Organizations

- 452 therapists
- 73% female, 73% Caucasian, 15% African American, 6% Asian/PI, 2% Hispanic
- 64% masters in social work, counseling, or psychology
- 41 MST programs
- 12 states and Canada

Treatment Outcomes

- Significant reductions in child behavior problems and functioning were found post-treatment and held through 6- and 12-months post-treatment
- Discharge was based on achievement of treatment goals in 73% of cases
- Discharge decisions were made by the therapist and family (versus external entity) in 64% of cases

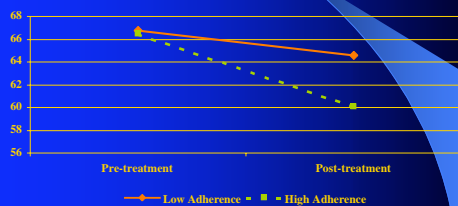
What Do We Know So Far About What Predicts Outcomes in Transportability Sites?

- **Therapist Adherence** (Schoenwald, Sheidow, Letourneau, & Liao, 2003, *Mental Health Services Research*)
- **Organizational Climate and Structure** (Schoenwald et al., 2003)
- **Consultant Adherence** (Schoenwald, Sheidow, & Letourneau, 2004, *Journal of Clinical Child and Adolescent Psychology*)

Adherence-Outcomes Linkages

- Higher adherence predicted post-treatment decreases in child behavior problems, and this relationship holds through 6- and 12-month post-treatment follow-up
- Higher adherence predicted positive discharge circumstances.

Pre-Post Differences In CBCL Total Scores by Adherence Level



Organizational Structure & Climate Findings

- Organizational structure and climate factors were **not** associated with adherence scores

Organizational Structure Variables Predicted MST Outcomes

- In organizations with more **hierarchical** structures, discharge decisions were more often made by individuals outside the MST team.
- In organizations characterized by greater **participation in decision making**, discharge was more often based on treatment success

One Organizational Climate Variable Predicted MST Outcomes

- **Opportunities for Advancement & Reward** predicted *less favorable* discharge circumstances (discharge decision made by external forces; discharge occurred because treatment was not successful) and *increases* in behavior problems

Why...?

- Did reward and advancement relate to greater youth behavior problems post-treatment?
- Did only one of five organizational climate factors relate to outcomes?

Partly, because:

- Adherence moderated the effects of some organizational variables on youth outcome

Moderation of Organizational Effects by Adherence Level (1)

- When Adherence was low, Advancement & Reward predicted increased child problems
- When Adherence was high, Advancement & Reward was unrelated to child problems
- When Adherence was high, Greater Procedural Specification predicted increased child problems
- When Adherence was Low, Greater Procedural Specification predicted unsuccessful discharge

Adherence Moderates Organization Effects on Outcomes

- Opportunities for Advancement & Reward appear to matter little when adherence is high, but translates into poorer outcomes when adherence is low
- Hierarchical Authority and Procedural Specification may interfere with positive outcomes when therapists are adhering to MST, but matters little when adherence is low.

What Might This Mean?

We need to understand more about:

- Criteria used in mental health provider organizations for advancement and reward, and the impact on therapists, clients, and organizations of including adherence and outcomes indicators in those criteria
- How organizational hierarchy and procedures interfere with adherence to a specific evidence-based practice

What Else Might this Mean?

- Clinicians have variable adherence
- We need to better understand what predicts this variability in adherence, so we can design and test ways to decrease it (variability, that is)

So, What Else Predicts Adherence?

- **MST Supervision** (Henggeler, Schoenwald, Liao, Letourneau, & Edwards, 2002)
- **MST Consultation predicts adherence, and parent-reported outcomes** (Schoenwald, Sheidow, & Letourneau, 2004)

Consultant Adherence

Consultant Adherence Measure (CAM)

- **Perceived Competence**
- **Perceived Alliance**
- **Perceived Focus on MST Procedures**

CAM - TAM Linkages

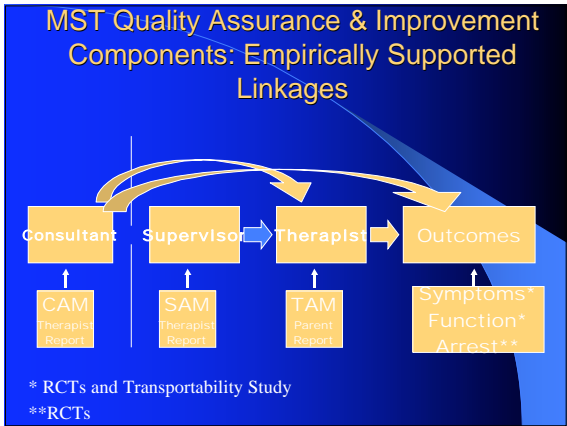
- **Consultant Competence** related positively to therapist adherence (+)
- **Consultant Alliance** related negatively to therapist adherence (-)
- **Consultant Focus on MST Procedures** did not relate to therapist adherence (n/a)

CAM - Outcome Linkages

- **Greater Consultant Competence** predicted fewer youth functioning problems
- **Greater Consultant Focus on MST Procedures** predicted fewer youth Externalizing and Internalizing problems
- **Greater Alliance** related positively to **Externalizing and Internalizing problems**

Implications of CAM Findings

- Instrumental aspects of consultation supported therapist adherence and improved youth outcomes.
- Supportive aspects of consultation were negatively associated with adherence and outcomes.
- Availability to clinicians of expert consultation can impact fidelity and outcomes at the front lines of service.



What Else Will We Learn from the MST Transportability Study?

At the youth and family level:

- 1-year post-treatment criminal outcomes
- Whether referral source or payment source predict outcomes
- How outcomes for families with more than one therapist (10% overall) compare

At the organizational and systems level:

- What predicts staff turnover?
- Links between organizational, referral, and reimbursement characteristics