Ethnicity and Therapy Process in Multisystemic Therapy

Dawn McDaniel, B.A.
Stan Huey, Jr., Ph.D.
Brittany Hall, B.A.
The University of Southern California
Multisystemic Therapy (MST)

- A family therapy for antisocial youth
- Based on a social-ecological approach
- Is context-sensitive and flexible

*MST treatment has been found to be effective “across various replications, problems, therapists, and settings.”*
MST Clinical Trial 2006

- MST study of substance-abusing juvenile offenders
- 159 youth/families randomly assigned to 1 of 4 treatment conditions:
  - Community Services, Drug Court with Community Services, Drug Court with MST, and Drug Court with MST enhanced with a Community Reinforcement Approach.
- Outcomes:
  - Decreased youth alcohol, heavy alcohol, marijuana, and polydrug use.

(Henggeler, Halliday-Boykins, Cunningham, Randall, Shapiro, and Chapman, 2006)
Therapist behavior in process literature

- Therapist structuring related to completion of treatment program.

- Therapist teaching related to client noncompliance.

- Therapist supporting and facilitating related to client cooperation.

(Alexander, Barton, Schaivo, and Parsons, 1976 and Patterson and Forgatch, 1985)
Within-session therapist behavior across time

<table>
<thead>
<tr>
<th>Early Treatment</th>
<th>Mid-Treatment</th>
<th>Late Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rapport building behaviors</td>
<td>Teaching and skill building behaviors</td>
<td>Structuring and supporting behaviors</td>
</tr>
</tbody>
</table>

(Robbins, Turner, Alexander, and Perez, 2003)
Gap in treatment process literature

- Literature suggests that African Americans see having mental health problems as more stigmatizing.
  - More serious problems when they enter treatment.
  - More likely to enter treatment under coercion.

- In the process literature, there is virtually no data on ethnic minorities and how they may differ from European Americans.
Are processes identical?

- MST has been found to be equally effective for African Americans and European Americans.
- To make the same progress in treatment, therapists may be behaving differently with African Americans.
- For instance, to engage clients early in treatment they would use more supportive and facilitative statements.
Research Questions

- Do frequency and patterns of therapist behavior fluctuate over time?
- Does the frequency and pattern of therapist behaviors differ as a function of ethnicity?
- Does ethnic match or mismatch influence the frequency and pattern of therapist behavior?
Participants

- Adolescents and their families who were involved in a larger clinical trial of MST.

- Inclusion criteria:
  - (a) involvement with and referral from the Charleston County Department of Juvenile Justice
  - (b) 12- to 17 years of age for the adolescent
  - (c) diagnosed with a substance abuse or dependence disorder
  - (d) residence in Charleston County
  - (e) residing with at least one caregiver
Method

- 6 masters-level therapists treated the families in two MST conditions.
  - Therapist racial composition: 50% African American and 50% European American.
- 40 families with audiotaped sessions from the initial, middle, and final month of treatment were selected.
  - Adolescent racial composition: 56.4% African American, 41% European American, and 2.6% other.
Therapy Process Code (TPC)

- TPC was used to code therapist and client process variables.
- TPC was designed to provide micro-analytic data on therapy with the families of antisocial or aggressive children.

(Chamberlain and Patterson, 1988)
Therapist Content Codes

- **Support**: “During the last week you have successfully dealt with a number of problems.”
- **Teach**: “Have you tried giving him chores?”
- **Information seek/question**: “What did he say after that?”
- **Facilitate**: short utterances that indicate therapist is paying attention “Umhmm,” “Hmm,” and “I see.”
Reliability

- Percent agreement reliabilities:
  - 71% for Support
  - 76% for Teach
  - 86% for Question
  - 80% for Facilitate

Overall percent agreements were 79% and overall Cohen’s Kappa was .72.
Data Analysis

- Do frequency and patterns of therapist behavior fluctuate over time?
  - Repeated Measures Analysis of Variance
  - To test the simple main effect for time
## Significant Findings

<table>
<thead>
<tr>
<th></th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilitating</td>
<td>*</td>
</tr>
<tr>
<td>Supporting</td>
<td>---</td>
</tr>
<tr>
<td>Teaching</td>
<td>*</td>
</tr>
<tr>
<td>Questioning</td>
<td>---</td>
</tr>
</tbody>
</table>

*p<.05
Mean levels of therapist behavior over time

F(1.70, 66.33) = 4.13, p < .05, $\eta^2 = .16$

F(2, 38) = 3.61, p < .05, $\eta^2 = .16$
Data Analysis

Does client ethnicity or ethnic match influence pattern of therapist behavior?

- Mixed Design ANOVAs
  - Between-subjects factor: client ethnicity or ethnic match
  - Within-subjects factor: time

To test the interaction effect of time and the group variable (client ethnicity and ethnic match)
## Significant Findings

<table>
<thead>
<tr>
<th></th>
<th>Time</th>
<th>Time x Client Ethnicity</th>
<th>Time x Ethnic Match</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilitating</td>
<td>*</td>
<td>+</td>
<td>*</td>
</tr>
<tr>
<td>Supporting</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Teaching</td>
<td>*</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Questioning</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

*p < .05
+p < .10
**Therapist Facilitating Behavior X Client Ethnicity**

\[ F(4, 72) = 2.13, \ p = .09, \ \eta^2 = .11. \]
Therapist Facilitating Behavior X Specific Ethnic Match

F(6, 68) = 2.42, p<.05, $\eta^2=.18$. 
Discussion

- Did the frequency and patterns of therapist behavior fluctuate over time?
  - Yes for some therapist behaviors; however, the changes were not as predicted.

- Did client ethnicity or ethnic match influence this change?
  - There were no differences on most measures.
  - Therapy process maybe similar for both European American and African American client and therapists.
Limitations

- Audiotaped data
- Adapting TPC for MST
  - Session length
  - Treatment procedure
  - Number of clients
- Sample size