THE RELATIONSHIP OF INTERVENTION FIDELITY AND OUTCOMES AMONG STIMULANT USERS

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Purpose

- In partnership with CTN protocol 0031
  (Stimulant Abuser Groups to Engage in 12-Step: STAGE-12)

- Assess the relationship between treatment fidelity and client-level outcomes
STAGE-12 Study
Stimulant Abuser Groups to Engage in 12-Step

- Twelve step Facilitation
- 10 intensive outpatient sites
- Stimulant users (n=471)
  - Randomized to STAGE-12 or TAU
- STAGE-12: 5 group and 3 individual sessions
- Baseline, 3 and 6 month follow-up
- Main findings not yet reported
Measuring fidelity

- Greater fidelity associated with better outcomes?
- Recent Meta-analysis (Webb and Barber, 2010)
  - 36 studies
  - 32 adherence-outcome, 17 competence-outcome findings
  - Did not find relationship (no significance)
Methods

- 9 Raters and 1 expert rater
  - 1 day in person training
  - Review of training manual
  - View 12 hours of STAGE-12 clinician training

- Random assignment of session DRFs
  - 966 DRFs were rated (n=215 unique individuals)
  - Sets of 20 w one session randomly assigned co-rating
  - Weighted co-efficient kappa .70
  - De-certification

- Bi-weekly conference call
Counselor Fidelity Measures

- **Global** (1 item)
  - “Overall, how well did this counselor conduct this specific group/individual session?”

- **Empathy** (1 item)
  - “Overall, how well did the counselor understand or make an effort to grasp the clients’ perspectives?”

- **Adherence** (3-9 items)
  - Assess degree to which therapists delivered each sessions prescribed content

- **Competence** (3-9 items)
  - Competence rating for all adherence items plus an overall rating
ASI Composite Means

- ASI Drug Composite Score
- ASI Alcohol Composite Score
- ASI Employment Composite Score
- ASI Medical Composite Score
- ASI Legal Composite Score
- ASI Family Composite Score
- ASI Psychiatric Composite Score

Graph shows trends from Baseline to 6-month with descending values.
## Fidelity and ASI Composite Scores

<table>
<thead>
<tr>
<th>Estimate p-value</th>
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<th>Empathy</th>
<th>Adherence</th>
<th>Competence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Drug</strong></td>
<td>0.7552 p=0.021</td>
<td>0.9677 p=0.001</td>
<td>0.8684 p=0.050</td>
<td>0.7983 p=0.031</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td>-0.8177 p=0.010</td>
<td>-0.4481 p=0.119</td>
<td>-1.1918 p=0.006</td>
<td>-1.0959 p=0.002</td>
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</tbody>
</table>
ASI Lite – Drug/Alcohol questions

- Number of days of drug use, past 30 days

- How many days have you been troubled or bothered by drug problems?

- How important to you now is treatment for drug problems?
## Fidelity and ASI Drug and alcohol questions

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<tr>
<td><strong># days Drug use Past 30 Days</strong></td>
<td>-1.0504 p=0.166</td>
<td>-0.7460 p=0.280</td>
<td>-1.7025 p=0.098</td>
<td>-1.6366 p=0.056</td>
</tr>
<tr>
<td><strong>Troubled by Drug Past 30 Days</strong></td>
<td>0.4829 p=0.021</td>
<td>0.4802 p=0.011</td>
<td>0.6526 p=0.020</td>
<td>0.4833 p=0.040</td>
</tr>
<tr>
<td><strong>Treatment for Drugs Past 30 days</strong></td>
<td>0.7525 p=0.004</td>
<td>0.7849 p=0.001</td>
<td>0.8473 p=0.018</td>
<td>0.8089 p=0.007</td>
</tr>
</tbody>
</table>
STAGE 12 vs TAU

# of Days Drug Use

Troubled by Drug

Tx for Drug

# of Days Drug Problem

Graphs showing comparisons between STAGE 12 and TAU for the number of days drug use, troubled by drug, treatment for drug, and number of days drug problem.
Fidelity related to outcome in unexpected way

- Higher (STAGE-12) fidelity associated with
- lower drug use
- Being more troubled by drug problems
  - One day at a time
- Greater need for treatment
  - 90 meetings in 90 days
- Unique to 12 step facilitation?