CHANGES IN DAILY DRINKING URGES DURING BEHAVIORAL ALCOHOL TREATMENT: UNIQUE CHANGE PROCESSES WITHIN PATIENT SUBGROUPS

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RSA MOBC Satellite Committee

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Outline

Background

Method & Results:
- Changes in urges during treatment
- Patient subgroups: drinking status and withdrawal history
- Changes in self-efficacy

Discussion: Theoretical and clinical implications
Processes question:

- What gives rise to the mechanism of behavior change?
A debate among psychology interns

2014: Internship didactic:

[Paraphrased]: I would discourage a client from an abstinence goal. Because if they’re dependent on alcohol, taking alcohol away would probably cause their urges to escalate. Their urges might keep going up until they inevitably relapse. Then they will lose confidence and learn, “well, what’s the point of even trying?”

- Smart, empathic, CBT-oriented, Ph.D.-level, non-AUD specialists
- Do clients share this concern?
Essentially a question about processes

Fazzino et al. (2013); Flannery et al. (1999, 2003); Moore et al. (2014); Subbaraman et al. (2013); Witkiewitz (2011, 2012); Yoon et al. (2006)
HOW MIGHT WE CLARIFY THIS CHANGE PROCESS?
Overview

- Drinking urges and abstinence initiation
  - Women’s & Men’s Alcohol Behavioral Couple Therapy (ABCT) Studies (McCrady et al., 1999, 2009)
  - Daily urges and drinking measures
  - Replication

- Self-efficacy and abstinence initiation
  - Women’s Group Therapy Study (Epstein et al., in prep)
METHOD
## Urge Studies

<table>
<thead>
<tr>
<th>RCT Conditions</th>
<th>Women’s ABCT Study (McCrady et al., 2009)</th>
<th>Men’s ABCT Study (McCrady et al., 1999)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual CBT vs. Alcohol Behavioral Couple Therapy</td>
<td>Alcohol Behavioral Couple Therapy Alcohol Behavioral Couple Therapy + AA Alcohol Behavioral Couple Therapy + RP</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Treatment Length</th>
<th>20 sessions</th>
<th>15 sessions</th>
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</thead>
<tbody>
<tr>
<td>Sample Size</td>
<td>$N = 98$ women</td>
<td>$N = 79$ men</td>
</tr>
<tr>
<td>Baseline PDD</td>
<td>66.5% (28.6)</td>
<td>59.7% (30.2)</td>
</tr>
<tr>
<td>Inclusion Criteria</td>
<td>Alcohol dependence or abuse Drank within 60 days before screen Committed, heterosexual relationship Partner willing to attend sessions</td>
<td></td>
</tr>
<tr>
<td>Exclusion criteria</td>
<td>Drug dependence (severe or with physiological dep) Current psychotic disorder Significant cognitive impairment Partner has AUD (Men’s study only)</td>
<td></td>
</tr>
<tr>
<td>Treatment Goal</td>
<td>Abstinence</td>
<td></td>
</tr>
</tbody>
</table>
Date: *June 21, 2016*

<table>
<thead>
<tr>
<th>Time</th>
<th>Strength</th>
<th>Trigger</th>
<th>Time</th>
<th>Drink Type</th>
<th>Amount</th>
<th>Trigger</th>
</tr>
</thead>
<tbody>
<tr>
<td>5:15 PM</td>
<td>6</td>
<td>Traffic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7:30 PM</td>
<td>7</td>
<td>Irritated</td>
<td>8:00 PM</td>
<td>Wine</td>
<td>1 bottle</td>
<td>Fight with partner</td>
</tr>
</tbody>
</table>

Analytic Goal: Changes in daily urges when abstinence is initiated

Growth curve modeling
- *Generalized linear mixed-effects models (GLMM)*
- *Immediate and gradual changes in daily urges*
- *Within-treatment urges only*

Classified participants based on if/when they achieved first 14 days of abstinence:

1. **Abstinence Initiators:** *Initiated abstinence during treatment*
   - N = 44 (women) and 30 (men)
2. **Already Abstainers:** *Initiated abstinence before first session*
   - N = 34 (women) and 33 (men)
3. **Continued Drinkers:** *Did not initiate abstinence during treatment*
   - N = 20 (women) and 16 (men)
Patient examples:

Start of abstinence period

Abstinence Initiator

Already Abstinent

Continued Drinker
RESULTS: WOMEN’S ABCT STUDY
Women’s ABCT Study

Urges on 39% of 11,487 daily recordings

Number of Urges per Day
Women’s ABCT Study

- Abstinence Initiation
- Drinking

Abstinence Initiators

After Abstinence Initiation

- Percentage of days with ≥1 urge
- Days since quit date

-28 -21 -14 -7 0 7 14 21 28 35 42 49 56 63 70 77 84 91 98 105 112 119
Women’s ABCT Study

* All changes significant
Women’s ABCT Study

* Change over time significant
Women’s ABCT Study

* Change over time significant
Summary: Women’s ABCT Study

■ Abstinence Initiators
  - *Sudden decrease in urges simultaneously with abstinence initiation*
  - *Gradual decrease in urges over time before and after abstinence initiation*

■ Already Abstainers
  - *Fewer urges at start of treatment*
  - *Gradual decreases over time*

■ Continued Drinkers
  - *Higher urges at start of treatment*
  - *Small, but significant decrease over time*
MEN’S ABCT STUDY

Replication?
Men’s ABCT Study

Urges on 36% of 6,834 daily recordings

- No Urges, 4644
- ≥1 Urge, 2604

Number of Days vs. Number of Urges per Day
Men’s ABCT Study

All changes significant except pre-abstinence slope ($p = .08$)
Men’s ABCT Study

* Change over time significant
Men’s ABCT Study

Change over time n.s. ($p = .54$)
DOES HISTORY OF ALCOHOL WITHDRAWAL MATTER?
Abstinence initiators **without** withdrawal history
(Women’s & Men’s ABCT Studies)

* All changes significant
Abstinence initiators with withdrawal history (Women’s & Men’s ABCT Studies)

* All changes significant
(Women’s & Men’s ABCT Studies)

* All changes significant
Abstinence initiators with withdrawal history (Women’s & Men’s ABCT Studies)

* All changes significant
SELF-EFFICACY
Method: Women’s Group Therapy Study

- 12-session RCT (Epstein et al., in prep)
  - Individual vs. group
  - Women-specific AUD treatment
  - $N = 121$
  - Weekly process measures, within-treatment only

- Abstinence Self-Efficacy
  - Situational Confidence Questionnaire (Annis & Graham, 1988)
  - 5 items (range: 0 to 100% confident)
Does Self-Efficacy Change in Relation to Abstinence?

- Abstinence Initiators \((n = 58)\)
- Already Abstainers \((n = 26)\)
- Continued Drinkers \((n = 37)\)
Weekly Self-Efficacy

All changes significant except pre-abstinence slope ($p = .67$)
Weekly Self-Efficacy

All changes significant except pre-abstinence slope ($p = .67$)
Weekly Self-Efficacy

Already Abstainers

* Change over time significant
Weekly Self-Efficacy

* Change over time significant
Summary of Findings

Changes in urges and self-efficacy
- Between-person differences: abstainers and drinkers
- Within-individual change: transition from drinking to abstinence
- Improved immediately and gradually over time
- Similar patterns and effect sizes in two studies (urges only)
Theoretical Implications

Importance of zooming in: By what process do MOBCs (urges, self-efficacy) develop?

Likely bi-directional relationships between MOBCs (urges, self-efficacy) and drinking

Drinking may maintain urges and weaken self-efficacy

- **Operant conditioning**: situation $\rightarrow$ urge $\rightarrow$ drinking $\rightarrow$ (reinforcement)
- **Consistency with cue-induction studies** (e.g., Christiansen et al., 2016; Ramirez et al., 2015)
Clinical Implications

- Patients may worry that abstinence makes urges worse.
  - *Smart, empathic, Ph.D.-level psychologists may too!*
- Urges are often distressing
  - *Clients may expect urges to get worse if they abstain/reduce drinking*
  - *Set positive treatment expectancies*
- Abstinence might improve craving & self-efficacy
  - *Not feeling confident in how to do something?*
  - *Maybe try anyway and the confidence will come.*
  - *AA saying: “Bring the body and the mind will follow.”*
Limitations

- Non-random assignment of abstinence categories
- Abstinence-based classification
  - vs. reduced drinking or harm reduction
- Paper-based self-monitoring cards
- Group-average analyses may not map onto every client’s experience
- Participants willingly initiated abstinence
  - May be different with forced abstinence (e.g., due to incarceration)
Future work

- Replication and other MOBCs?
- Would data change patients’ expectancies?
- Would personalized data and feedback help?
  - *How to implement on wider scale?*
  - *How to make MOBC/process data useful and understandable to clinicians and patients?*
Thank you!
Selected References


Thank you!

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