Mixed Methods Approach Towards Understanding Perceived Need for Drug Treatment

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Mixed Methods Approach towards Understanding Perceived Need for Drug Treatment

- 80-95% of individuals with drug use disorders do NOT perceive a need for treatment

NSDUH 2009
Mixed Methods Approach towards Understanding Perceived Need for Drug Treatment:

**BACKGROUND**

- Perceived need often the strongest or very strong predictor of treatment utilization
- Various forms of coercion (legal, family, employment) play key roles
- Access can play a key role as well (multi-dimensional including travel time, availability, cost)
- Measurement of PN usually dichotomous (e.g., NSDUH) or reduced from Likert scale to yes/no, yet PN is not binary! Can we do a better job?
Mixed Methods Approach towards Understanding Perceived Need for Drug Treatment

- What goes into the decision-making or what are the thought processes behind PN? Why would someone with drug users disorders NOT perceive a need, given they acknowledge multiple negative consequences of their drug use?
- What do drug users tell us about their thoughts of going to treatment, in their own words?
- Does PN vary by specific populations, e.g., are there rural/urban differences?
- What can the brain tell us re: perceived need?
  - How does perceived need correlate with discounting the future?
  - How does the brain encode beliefs that legitimize the negative consequences of drug use?
Mixed Methods Approach towards Understanding Perceived Need for Drug Treatment

- Results here are very preliminary and studies are ongoing
- Tricky enough to join together quantitative and qualitative data
- CHALLENGE is to TRIANGULATE in the neuroscience as well!
Data Sources for Symposium

- Mixed methods study of rural and urban African-American cocaine users (DA026837) (any use in past 30 days)
  - Upwards of 50-60 semi-structured qualitative interviews (currently 42)—Cheney talk
  - Goal of 200 urban and 200 rural participants in quantitative interview (currently 178)—Booth & Borders talks

- Pilot study of 20 cocaine-dependent individuals
  - Qualitative interviews (not reported here)
  - Quantitative interviews (instruments overlap with my talk)
  - fMRI tasks and scans (currently 10)—James talk
Measurement of Perceived Need for Treatment among African-American Cocaine Users

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Background: Generalities re: Perceived Need for Drug Treatment

- highly significant in terms of predicting treatment entry
- people in treatment don’t necessarily perceive a need for tx!
  
  — Too bad NSDUH/NESARC do not ask re: need if in tx!
- analyzed in terms of consequences of drug use (DSM-IV criteria/MH dx) or just drug use, demographic factors, or Andersen/Aday model
- What other beliefs might possibly be associated?
Background:
internal correlates of perceived need for cocaine treatment

Started from scratch thinking about what kinds of thinking/beliefs might determine PN (no preconceived model)

• Do you have dominant + or – experiences w cocaine?
• What are your beliefs re: tx?
• Do you think you can cut down on use without tx?
• Motivation/readiness for change (much in alcohol literature)
Rural/Urban Differences in PN for Treatment in African-American Cocaine Users

- Grew out of multi-site longitudinal community study of rural stimulant users, rural Arkansas extremely low tx rates
- Funded by NIDA in 2010, focused on understanding perceived need for tx (Borders will say more)
- Any users of cocaine in past 30 days (i.e., not dependent only)
- Not in tx within past 30 days
- Data will be from first 178 participants
  - 58% rural
  - 63% male
Instruments

• Cocaine Effects Questionnaire (Rohsenow, 2004, adapted from Alcohol Expectancies)
  – Enhanced well-being
  – Sexual enhancement
  – Pain reduction
  – Increased aggressiveness
  – Social facilitation
  – Social withdrawal & distrust
  – Increased tension

• Attitudes towards Help-Seeking, adapted from Mackenzie et al., 2004
  – Easy availability/knowledge/willingness of help
  – Need for privacy
  – Stigma of help-seeking or drug use

1Addictive Behaviors, 2004; 2J App Social Psych, 2004
Assessments: 4 rulers scale 1-10
Modeled on methods work in readiness for change literature

- Need for treatment:
  - How much you need treatment for your use of cocaine

- Readiness Ruler:
  - How ready you are to make a change in use of cocaine

- Capability Ruler
  - How capable you are of making a change *on your own*

- Effectiveness Ruler
  - Whether you think addiction tx would be effective in helping you make a change
Factor Analysis, n=176

- Do rulers, CEQ, and Attitudes towards tx have single underlying latent construct?
  - No! Separate out into factors for each instrument
- CEQ:
  - Several factor analyses using different approaches identified some common constructs similar to original but not identical
  - Went with 2 scales, + expectancies and - expectancies
- Attitudes Towards Treatment
  - Generally one factor on knowledge and availability of tx, another related to stigma, but nothing particularly convincing and not correlated with perceived need
Ruler1: Perceived Need for Cocaine Treatment

Note: one-third/178 @ extremities!
Descriptive Results

Ruler Means

Need: 5.1 (2.9)  Readiness: 6.5 (2.8)
Capability: 6.8 (2.2)  Effectiveness: 6.3 (2.8)

Correlations

• Need: Readiness: 0.3 (p < 0.0001)
  Capability: 0.05
  Effectiveness: 0.5 (p < 0.0001)
  Positive Cocaine Experiences: 0.04
  Negative Cocaine Experiences: 0.2 (p=0.003)
  Attitudes Towards Treatment Scales: NS
Results: Exploratory Multiple Linear Regression for Perceived Need Ruler (n=176)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Regression Coefficient</th>
<th>SE</th>
<th>P</th>
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<tbody>
<tr>
<td>Readiness for change</td>
<td>0.15</td>
<td>0.08</td>
<td>0.05</td>
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<tr>
<td>Capacity on own</td>
<td>-0.31</td>
<td>0.10</td>
<td>0.0016</td>
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<tr>
<td>Effectiveness of tx for change</td>
<td>0.57</td>
<td>0.08</td>
<td>&lt; 0.0001</td>
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<tr>
<td>Positive cocaine experiences</td>
<td>-0.005</td>
<td>0.006</td>
<td>VERY NS</td>
</tr>
<tr>
<td>Negative cocaine experiences</td>
<td>0.04</td>
<td>0.01</td>
<td>0.0024</td>
</tr>
</tbody>
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Note, still exploring distribution of ruler. Re-analysis as Gamma distribution provided similar results. Results will change when add in other variables.
Working Conclusions (so far)

- Perceived Need for Treatment is definitely not dichotomous! Note NESARC and NSDUH!
- Internal “beliefs” and experiences are clearly associated; note they may “disappear” as more analyses with more traditional factors are done
- Knowledge of help resources/privacy/stigma not necessarily associated with perceived treatment need
- Size of regression coefficients: greatest “impact” from belief tx would be effective:
  - 0.5 pt change effectiveness of tx → 1 pt change in PN tx.
  - 0.4 pt change in capability on own → 1 pt change in PN tx
  - May indicate opportunities for intervention