# Motivation-Based and Skill-Based: A Framework for Characterizing Common Factor Processes in Brief Interventions for AUD Treatment

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# 13th Annual Conference of INEBRIA The challenge of complexity: updating models and practice

- Why do different brief interventions typically perform similarly well in RCTs?
- The underlying assumption of an RCT is that one best treatment can be discovered.
- Otherwise, why would we keep testing specific therapies against each other?
- Yet, the RCT framework might have hindered our capacity to understand how treatment works.



#### The Problem is the RCT Model of Inference

#### FOR EXAMPLE

IF Treatment A performs better than Treatment B



>



**VS** assessment

THEN We Infer A produced the change



= Change

AND We Infer Not B produced the change



≠ Change



In other words something occurred in A that didn't occur in B that was beneficial.

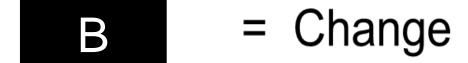
#### The Problem is the RCT Model of Inference

• IF A and B are = THEN what happened?



 THEN A & B worked in unknown ways that were either the same or different.



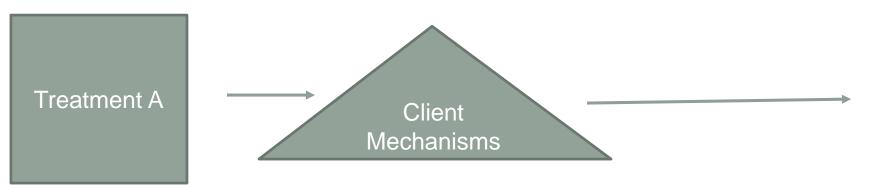




The result is multiple available treatments that work moderately well, have similar effectiveness, but are poorly understood.

## At the risk of being overly reductionist

- The RCT paradigm assumes a single, uniquely beneficial treatment package can be discovered.
- If this has not happened to date, we should consider alternative paradigms.
- Common Factors of Change, across established modalities of treatment, is one alternative paradigm.











# Study Purpose and Rationale I

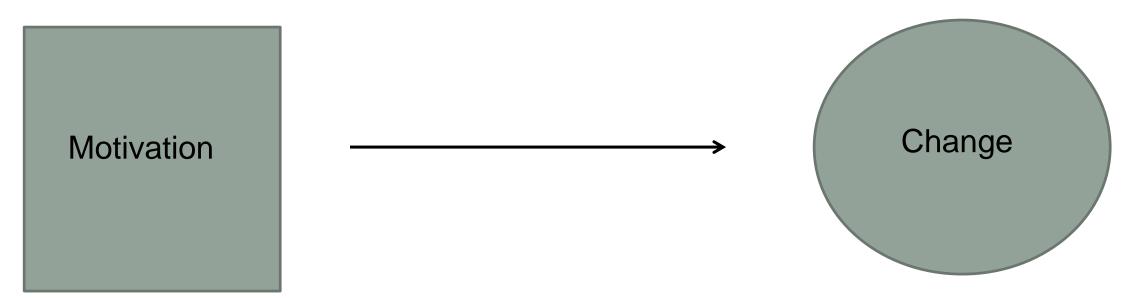
- The absence of differential efficacy between evidence-based brief interventions compromises tests of modality-specific mechanisms.
- Characterizing all brief interventions by a single process model could be overly simplistic.
- This presentation argues many brief interventions can be characterized by differential reliance on motivation- and skill-based methods.
- This is a slight variation on a Common Factor Framework.



# The Two Key Underlying Assumptions

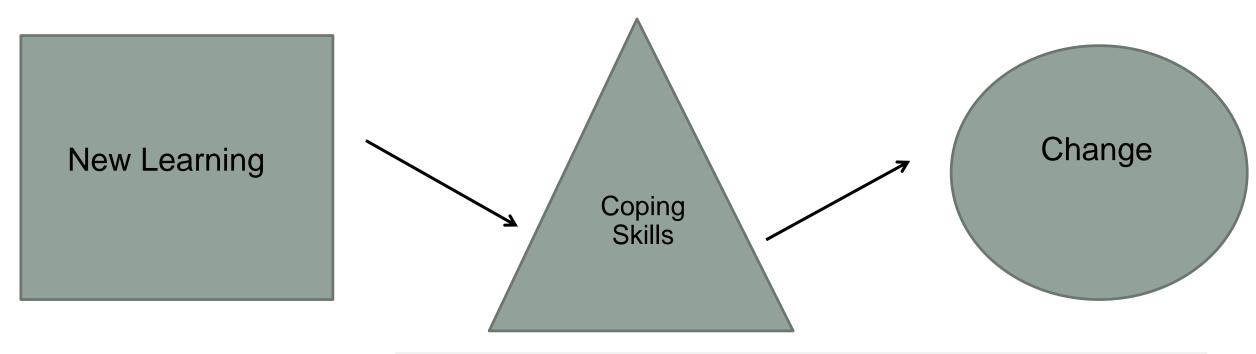


#### **Motivation-Based AUD Treatments**



Motivation-based treatments use client-centered, exploratory methods to guide clients toward verbalizing there own reasons for change. To a certain extent, the decision to change is assumed to be made in the moment, *during the session*.

#### Skill-Based AUD Treatments



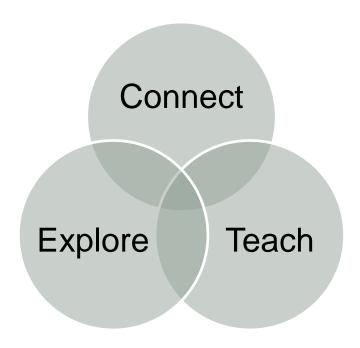
Skill-based treatments use didactic methods to teach clients specific skills to achieve and maintain behavior change. To a certain extent, the decision is assumed to have been made, the client only needs skills, and behavioral changes occur *outside the session*.

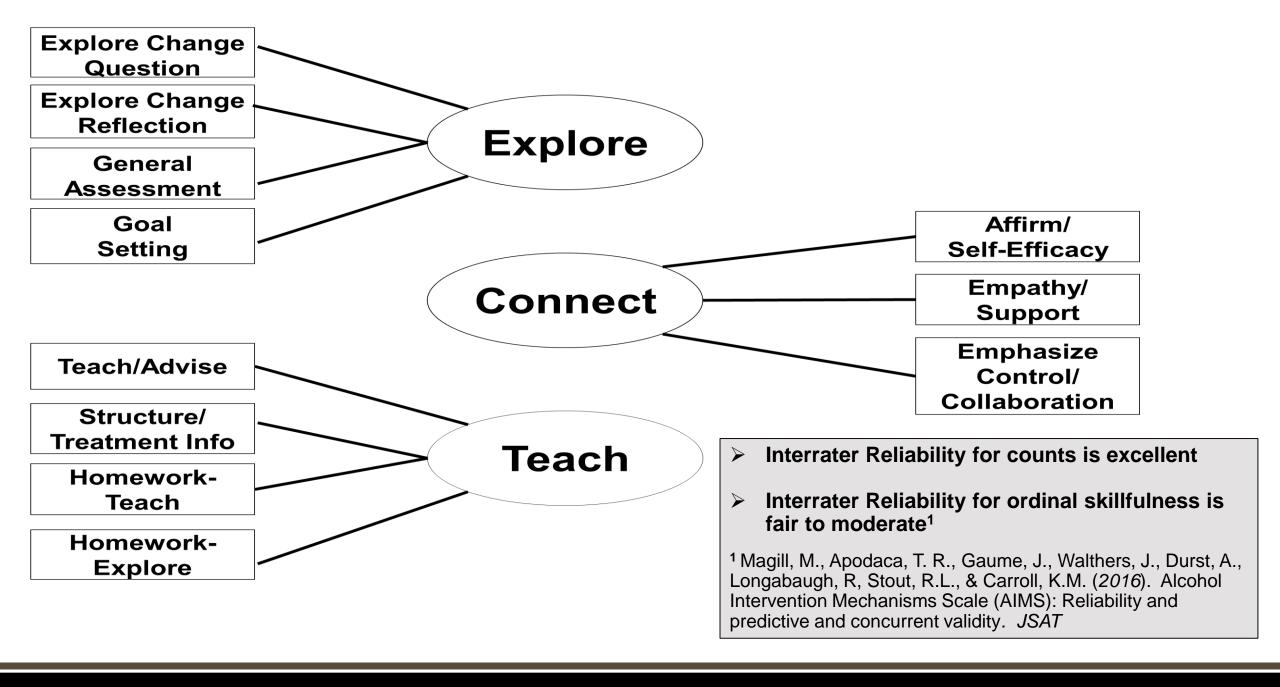
# Study Purpose and Rationale II

- This study examines these two core factors of change across three AUD treatments (CBT, TSF, MET) that were delivered with high fidelity and condition discriminability -
- To do so, create an observational coding system (Magill & Apodaca, 2011a) that attempts to measure core processes or, *functions* of behavioral AUD treatments *Alcohol Intervention Mechanisms Scale*
- Create an observational coding system (Magill & Apodaca, 2011b) that assesses "Change Talk" regarding main effects (drinking outcomes) and proximal effects (coping outcomes) separately – Client Language Assessment Proximal/Distal

#### Alcohol Intervention Mechanisms Scale

- Three primary therapeutic functions: Explore (4 codes), Teach (4 codes), and Connect (3 codes)
- Eg. Explore "what would you like to do about your drinking?" [CODE: EXPLORE/question about change]
- Eg. Teach "a standard drink is a 12oz beer, 5oz glass of wine, and 1.5oz liquor" [CODE: TEACH/ teach/advise]
- Eg. Connect "it is hard to face these consequences of your drinking"
   [CODE: CONNECT/empathic statement]





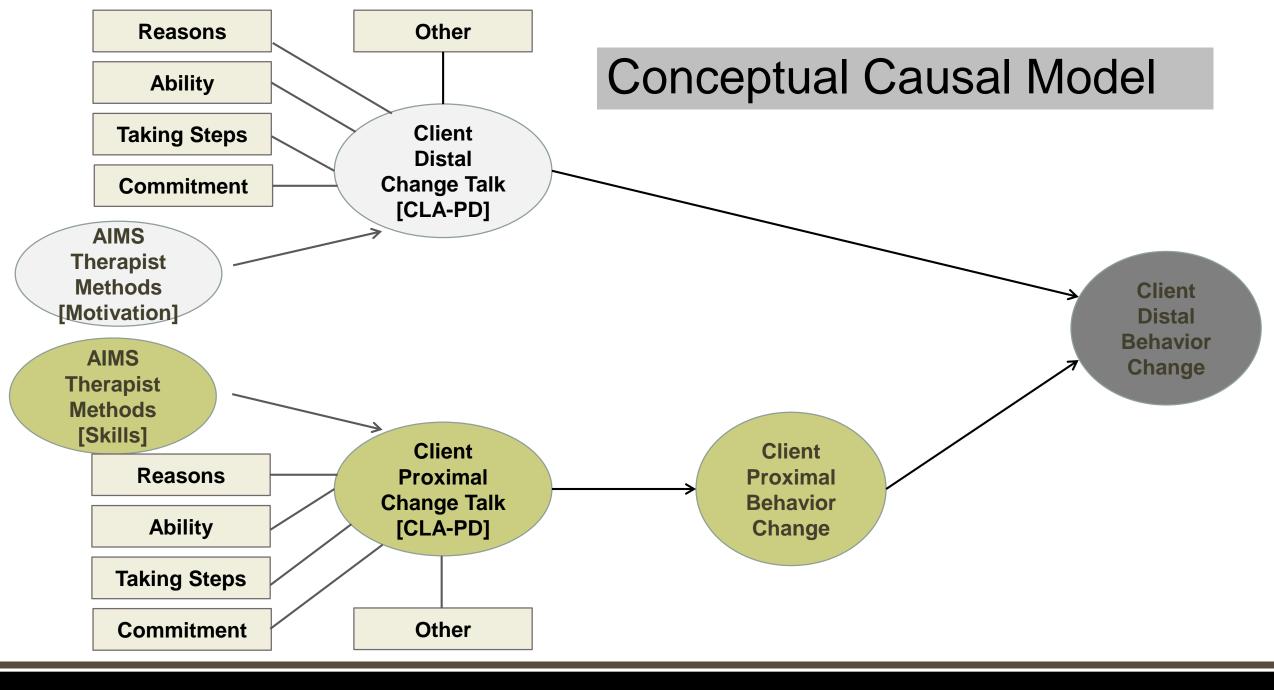
# Client Language Assessment- Proximal/Distal

- The CLA-PD measures client verbalized decision-making in interventions targeting a specified behavior change
- There are 5 dimensions for *Change Talk*, which are derived from the MISC (Miller et al., 2003; 2008; Houck et al., 2010)
- CLA-PD, Change Talk codes are sub-divided, allowing Distal and Proximal decision-making paths to be modeled separately
- Distal Change Talk is about the target change
- Proximal Change Talk is about intermediate coping change

#### The CLA-PD Measures Client Common Factors

- Inter-rater reliability results showed excellent reliability; two-way mixed ICC ranged from .83 to .95 for CLA-PD summary scores
- Convergent validity with an alternative (MISC-based) client language rating system<sup>1</sup> showed moderate correlations (p < .001)</li>
- Criterion predictive validity suggested that Change Talk Distal scores were predictive of 3- and 12-month drinking frequency and quantity and Change Talk Proximal scores predicted intermediate, post-session, coping behavior (ps < .05 - .005)<sup>2</sup>

<sup>1</sup>Karno et al., 2004; 2005; 2010, <sup>2</sup>Magill, M., Apodaca, T. R., Karno, M., Gaume, J., Walthers, J., Durst, A., Stout, R.L., DiClemente, C. (2016) The Client Language Assessment - Proximal/Distal (CLA-PD): Reliability and validity of an observational measure of client decision-making. *JSAT* 



# **Therapist-Client Interactions**



## Analyses: The interactions between therapists and clients

**Aim.** Test two common factor hypotheses about therapist-to-client transitions in behavior change interventions for adult AUDS

**Sequential analyses (GSEQ)** examined lagged (j + 1) transitional probabilities between:

- Therapist Interventions: Exploring, Teaching, and Connecting [AIMS]
- Client discussions of drinking and coping: Distal and Proximal Change Talk [CLA-PD]
- H<sub>1</sub> Exploring Interventions will elicit more Distal/Drinking than Proximal CT
   H<sub>2</sub> Teaching Interventions will elicit more Proximal/Coping than Distal CT
   H<sub>0</sub> No directional Hypotheses for Connecting Interventions

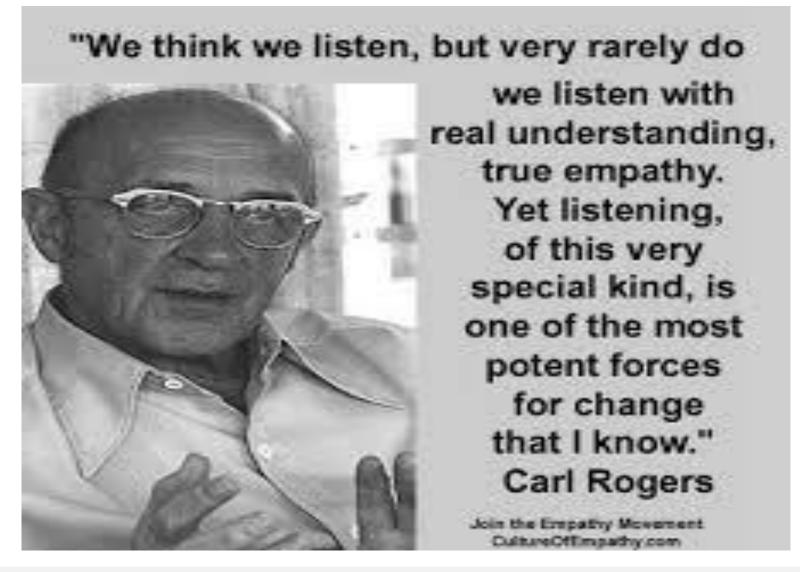
#### Results: The interactions between therapists and clients

- 1. Therapist Exploratory Interventions predicted subsequent client discussion of distal, drinking behavior, while suppressing discussion of proximal, coping behavior and neutral content. H<sub>1</sub> supported
- 2. Unexpectedly, Therapist Teaching Interventions suppressed distal drinking language, was NS regarding coping language and significantly predicted neutral content. H<sub>2</sub> unsupported
- 3. Therapist Connecting Interventions increased both drinking and coping language, particularly positive language.

Magill, M., Walthers, J., Mastroleo, N.R., Gaume, J., Longabaugh, R., Stout, R.L., & Apodaca, T.R. (2016). Therapist and client discussions of drinking and coping: A sequential analysis of therapy dialogues. *ADDICTION*.

#### Discussion

- The present study yields interesting findings regarding therapist predictors of subsequent client change talk in three evidence-based AUD interventions.
- Because client change talk has demonstrated predictive validity regarding a number of behavioral outcomes of interest, this study highlights the importance of therapist Exploration and Connection as key interventions to elicit it.
- The way in which teaching interventions operate to predict subsequent behavior change warrants further process study with different proposed mechanisms.
- Therefore, we were better able to support the motivation-based than the skill-based model of brief interventions in this sample of treatments.



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# Thank you for your attention Merci!

