

# **The Role of Supportive Attitudes, Readiness and Skill Assessment in the Effective Use of Motivational Interviewing**



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# BACKGROUND



- (1) Current research on implementation does not include constellation of counselor characteristics. Focus is usually on attitudes or organizational factors. What else matters?  
Readiness/Skill/Confidence?**
- (2) Competency in evidence-based practices and practitioner readiness are not explicitly included in models.**

# Process and Practice Improvement (PPI) Study



- Texas Process and Practice Improvement (PPI) Study, funded by the National Institute on Drug Abuse (NIDA).
- Larger study looked at impact of program-level interventions (organizational change training and quarterly outcome feedback reports) on public substance abuse outpatient treatment centers' implementation of motivational interviewing

# Methods



- 89 counselors comes from 25 different clinics. The response rate for the PPI Counselor Survey among counselors was 73 percent
- Motivational interviewing skill assessed with convenience sample of 14 clinics from the 25 participating clinics.
- The VASE-R administered in person to 50 counselors employed by these 14 clinics during 2008-2009.

# Sample Geography



# SELECTION OF STUDY VARIABLES



Counselor characteristics and hypothesized relationships come from current models:

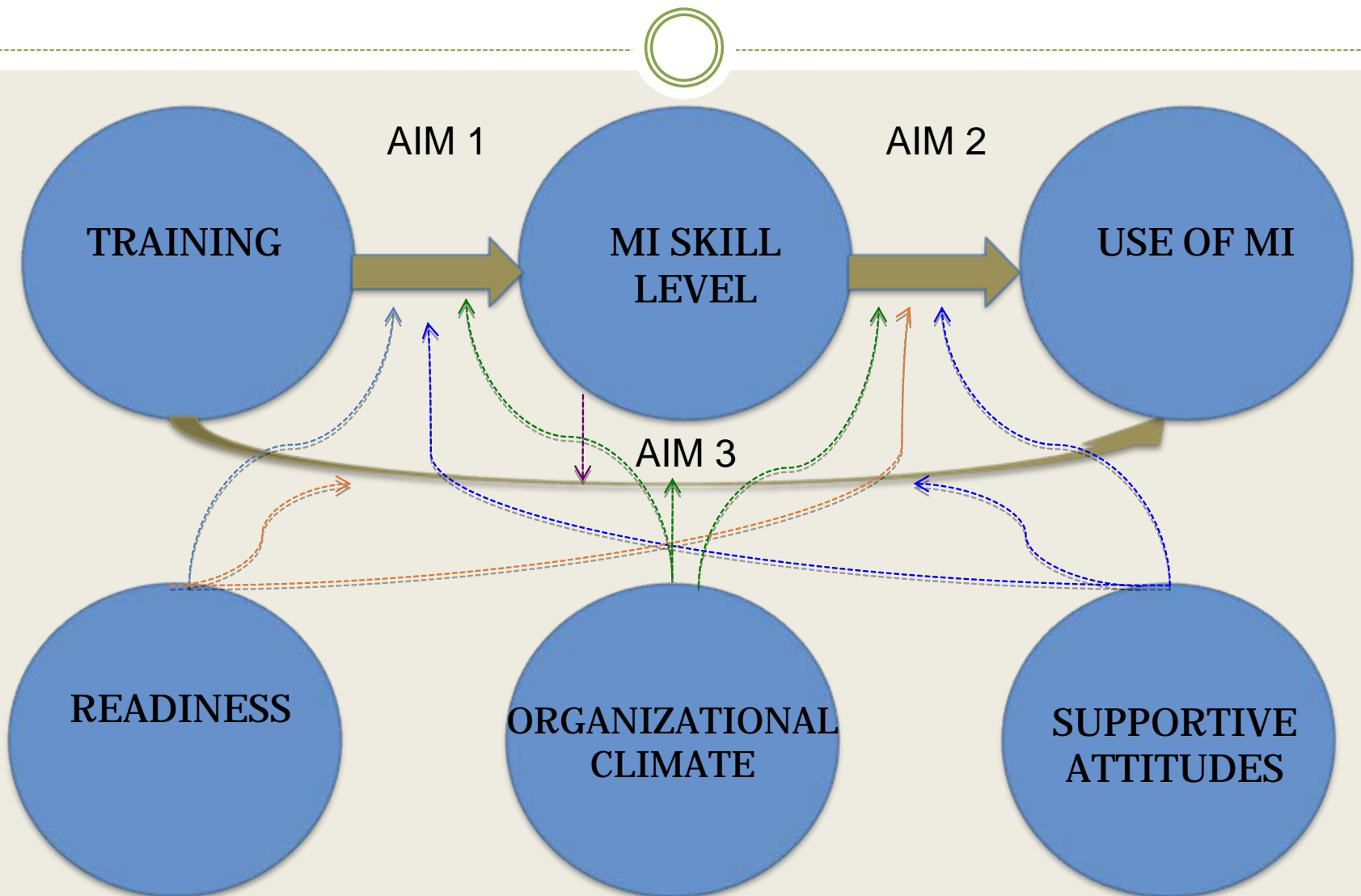
- Training → Skill (Fixsen et al., Simpson et al., Proctor)
- Skill → Use (Regehr et al., Rosen, Simpson et al.)
- Training → Use (Fixsen et al., Regehr et al., Simpson et al.)
- Role of attitudes (Aarons, Nelson & Steele, Rogers)
- Role of organizational context (Glisson, Proctor, Regehr et al., Simpson et al.)

# STUDY AIMS/RESEARCH QUESTIONS



1. Test direct and indirect relationship between *Amount of MI Training* and *MI Skill Level*. **Is amount of training related to skill level?**
2. Test direct and indirect relationship between *MI Skill Level* and *Use of MI*. **Is skill level related to extent of use?**
3. Test direct and indirect relationship between *Amount of MI Training* and *Use of MI*. **Does more training lead to more use?**

# CONCEPTUAL MODEL



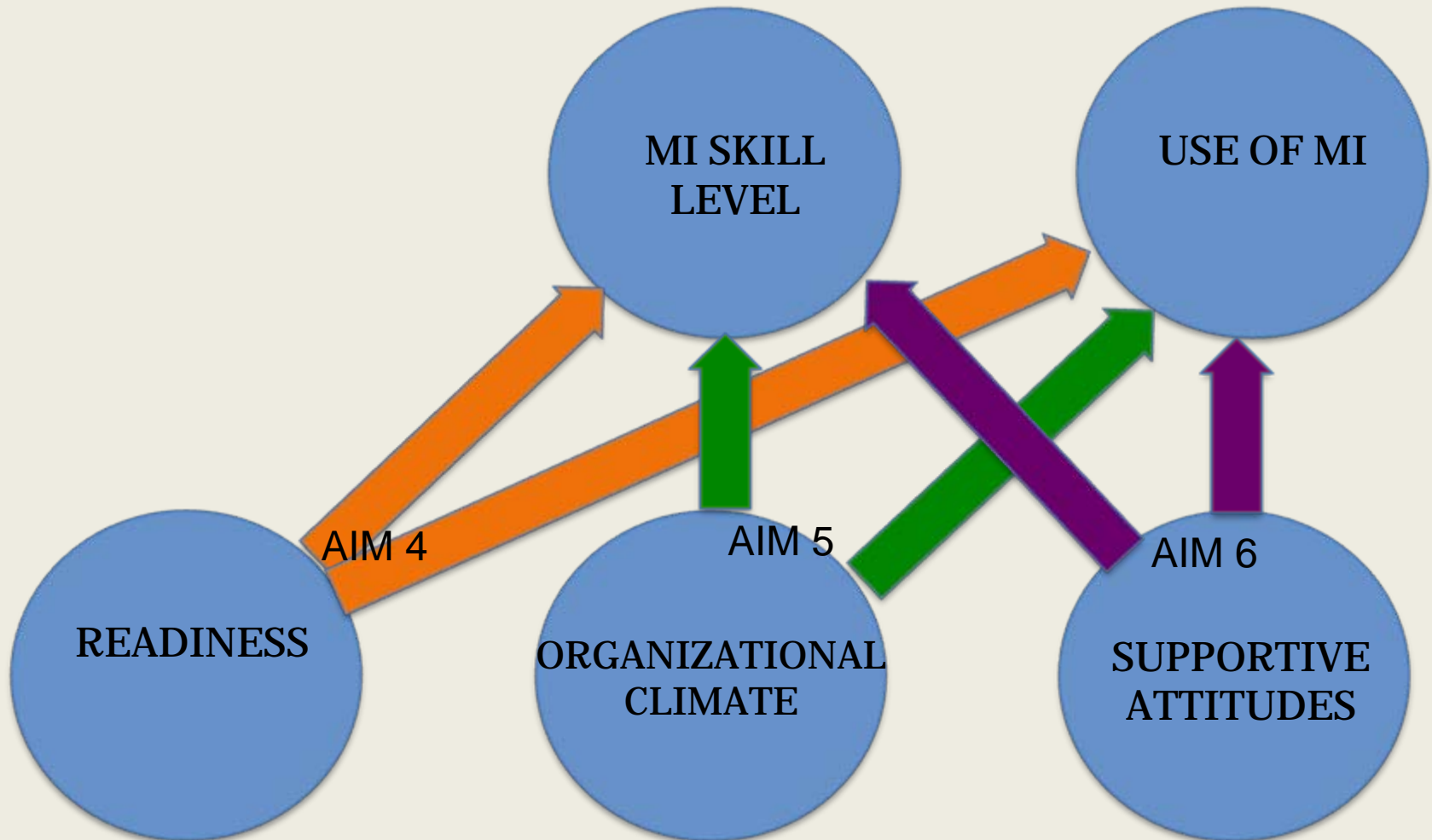


# STUDY AIMS/RESEARCH QUESTIONS, cont'd



4. Test relationship between *Readiness to Use MI* and *MI Skill Level*, and *Readiness to Use MI* and *Use of MI*. **How does counselor readiness relate to skill level and use?**
5. Test relationships between *Organizational Climate* and *MI Skill Level*, and *Organizational Climate* and *Use of MI*. **How does climate relate to skill level and use?**
6. Test relationships between *Supportive Attitudes related to MI* and *MI Skill Level*, and *Supportive Attitudes related to MI* and *Use of MI*. **How do counselor attitudes relate to skill level and use?**

# CONCEPTUAL MODEL



# DIRECT EFFECTS HYPOTHESES



Four hypotheses test direct relationships between each counselor characteristic and *MI Skill Level*.

Five hypotheses test direct relationships between each counselor characteristic and *Use of MI*.

# INTERACTION HYPOTHESES



Three hypotheses test for the presence of a moderating variable in the relationship between *Amount of MI Training* and *MI Skill Level*.

Three hypotheses test for the presence of a moderating variable in the relationship between *MI Skill Level* and *Use of MI*.

Four hypotheses test for the presence of a moderating variable in the relationship between *Amount of MI Training* and *Use of MI*.

# MEDIATION HYPOTHESES



Three hypotheses test for the presence of mediation by a third variable in the relationship between *Amount of MI Training* and *MI Skill Level*.

Three hypotheses test for the presence of mediation by a third variable in the relationship between *MI Skill Level* and *Use of MI*.

Four hypotheses test for the presence of mediation by a third variable in the relationship between *Amount of MI Training* and *Use of MI*.

# METHODS



- Counselor survey data from Process and Practice Improvement (NIDA-funded) study (N=89)
- Outpatient substance abuse counselors from Texas state-funded clinics
- Counselor Motivational Interviewing skill assessed with Video-Assessment of Simulated Encounters (Revised) VASE-R (N=50)
- Multiple regression
- Baron and Kenny (1986) four steps for mediation

# LIMITATIONS



- Data used in cross-sectional analysis comes from two time points
- Counselors who completed skill measure were not randomly selected; convenience sample
- Training measure is simplistic
- Skill measure
- *Use of MI* measure

# DATA ANALYSIS



**Multiple regression was used to test for interaction and mediation as well as the relative contributions of variables to each dependent variable.**



# RESULTS – DIRECT EFFECTS



- Aim 1: *Amount of MI Training* was not statistically significantly related to *MI Skill Level*.
- Aim 2: *MI Skill Level* was not statistically significantly related to *Use of MI*.
- Aim 3: *Amount of MI Training* was statistically significantly related to *Use of MI*.
- Aim 4: (a) *Readiness to Use MI* was statistically significantly related to *MI Skill Level*. (b) *Readiness to Use MI* was statistically significantly related to *Use of MI*.
- Aim 5: (a) *Organizational Climate* was not statistically significantly related to *MI Skill Level*. (b) *Organizational Climate* was not statistically significantly related to *Use of MI*.
- Aim 6: (a) *Supportive Attitudes related to MI* was not statistically significantly related to *MI Skill Level*. (b) *Supportive Attitudes related to MI* was statistically significantly related to *Use of MI*.

# RESULTS-INTERACTION



**None of the interaction terms were statistically significant.**

# 4 STEPS TO SHOW MEDIATION



1. The IV significantly affects the mediator
2. The IV significantly affects the DV in the absence of the mediator
3. The mediator has a significant unique effect on the DV
4. The effect of the IV on the DV shrinks upon addition of the mediator to the model

Baron and Kenny (1986)

# RESULTS-MEDIATION



*Supportive Attitudes related to MI*

(Sobel=1.98,  $p=.047$ )

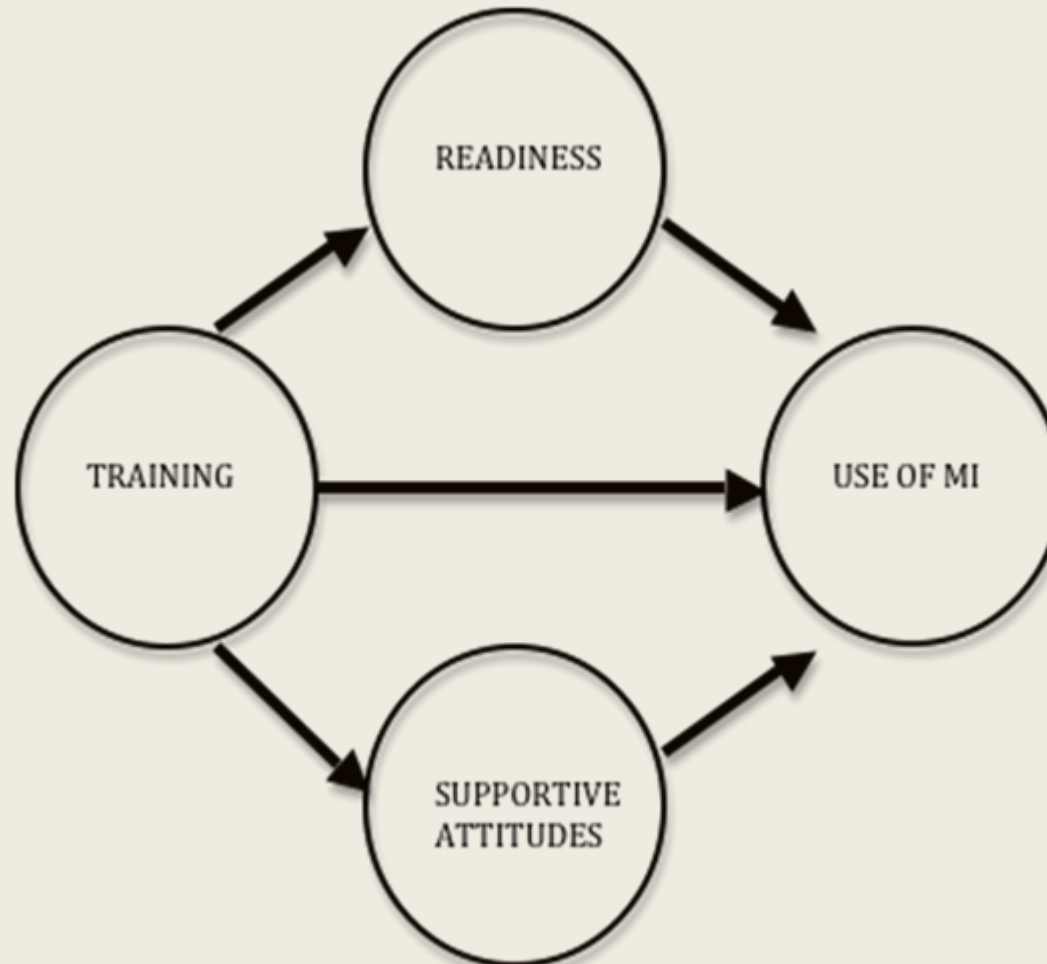
&

*Readiness to Use MI*

(Sobel=2.98,  $p=.003$ )

each partially mediates the relationship between  
*Amount of MI Training* and *Use of MI* (Aim 3).

# ILLUSTRATION OF MEDIATION RESULTS



# RESULTS-MULTIPLE REGRESSION



After controlling for *Highest Educational Degree*, *Readiness to Use MI* was statistically significantly associated with *MI Skill Level* ( $R^2$  Change=.174,  $p$ =.018).

After controlling for *Highest Educational Degree*, *Readiness to Use MI* and *Supportive Attitudes related to MI* was statistically significantly associated with *Use of MI* ( $R^2$  Change=.501,  $p$ <.001).

# NON SIGNIFICANT RESULTS



Counselor characteristics that were not associated with counselors' *MI Skill Level*:

- Amount of MI Training
- Perception of Organizational Climate
- Supportive Attitudes related to MI

Counselor characteristics that were not associated with counselors' *Use of MI*:

- MI Skill Level
- Perception of Organizational Climate

# PRACTICE IMPLICATIONS



- Skill level is not associated with use of MI
- Supportive Attitudes and Readiness to Use MI better explain Use of MI than Amount of MI Training received
- Both Supportive Attitudes and Readiness are associated with Use of MI
- Attitudes towards a practice by users must be addressed in training to promote use of EBPs
- Trainings in MI should address the need for skill assessment prior to use of MI to establish competency
- Graduate education should offer EBPs skill assessments to ensure competency



# TAKE HOME MESSAGE



- Despite low skill, the best predictor of use of MI was amount of training in MI
- High reported use despite low skill

# THEORETICAL IMPLICATIONS



**Implementation models should include:**

- **Skill level**
- **Readiness**
- **Attitudes**

# FUTURE RESEARCH



- More evaluation of evidence-based practices *trainings and follow up consultation* to establish they effectively impart competency
- More research to understand how EBPs skill, not just receipt of training, affects EBPs usage, and understand what influences skill development
- More research related to how attitudes can be influenced to promote adoption