Clinician Training Research: Implications for Clinical Supervision

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My Journey in Supervision
Definition

- Evidence-based practice is the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences.

Bridging the Gap

- **U.S. Institute of Medicine 1998 Report**
  - Promising new treatments for addictions, developed in research centers, are ‘dying on the shelf’
  - Not getting used in community-based treatment
National Drug Abuse Treatment Clinical Trials Network

 chave: 16 RRTCs & 240 CTPs across 37 States and Puerto Rico
# Clinician Characteristics

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>MIA (41)</th>
<th>MET (35)</th>
<th>MET-S (23)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Age</td>
<td>40.3 (9.5)</td>
<td>41.1 (11.9)</td>
<td>36.2 (8.2)</td>
</tr>
<tr>
<td>% Female</td>
<td>64%</td>
<td>61%</td>
<td>64%</td>
</tr>
<tr>
<td>% Caucasian</td>
<td>82%</td>
<td>78%</td>
<td>26%</td>
</tr>
<tr>
<td>% Master’s Degree</td>
<td>46%</td>
<td>44%</td>
<td>36%</td>
</tr>
<tr>
<td>% Licensed</td>
<td>75%</td>
<td>44%</td>
<td>48%</td>
</tr>
<tr>
<td>Mean Yrs Counseling</td>
<td>6.6 (4.2)</td>
<td>8.8 (6.6)</td>
<td>6.4 (4.9)</td>
</tr>
<tr>
<td>% In Recovery</td>
<td>56%</td>
<td>53%</td>
<td>24%</td>
</tr>
</tbody>
</table>
What Is Usual about Counseling-as-Usual?

- From MI/MET trials, examined what happened in 379 audiotaped CAU sessions
- Rated them using our Independent Tape Rater Scale
- Focused on 31 items that addressed specific therapeutic strategies

Primary counseling orientations endorsed **BEFORE** randomization and training

- Psychodynamic
- Rogerian
- Motivational interviewing
- Reality therapy
- CBT
- 12-Step
What interventions characterized CAU?

- Treatment planning
- Education
- Unsolicited advice
- Self-help
- Program orient
- Assess social functioning
- Assess substance use

Mean adherence scores
What interventions NEVER occurred in CAU? (occurring in < 20% of sessions and mean rating < 2)

- Emphasize abstinence
- Spirituality
- Cognition
- Ambivalence
- Risk reduction training
- Skills training

% rated NEVER
What else RARELY occurred in CAU? (occurring in < 30% of sessions and had a mean adherence rating < 3)
The Informal Discussion Item

To what extent did the clinician speak with the client about topics that were not related to the problems for which the client entered treatment or make self-disclosures unrelated to the counselors’ experiences with recovery?

Chat


<table>
<thead>
<tr>
<th>Informal Discussion Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Experiences</td>
</tr>
<tr>
<td>Personal Information</td>
</tr>
<tr>
<td>Addiction Problems of Significant Others</td>
</tr>
<tr>
<td>Psychological/Interpersonal Problems</td>
</tr>
<tr>
<td>Health Problems</td>
</tr>
<tr>
<td>Opinions Not Related to Client’s Treatment</td>
</tr>
<tr>
<td>Current Events or News</td>
</tr>
<tr>
<td>Personal Feelings about Client</td>
</tr>
<tr>
<td>Work-related Problems</td>
</tr>
<tr>
<td>Professional Background</td>
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<tr>
<td>Other</td>
</tr>
</tbody>
</table>

In MI/MET studies, clinicians chatted in 42% of all sessions and 88% chatted at least once in their sessions.

In METS study, clinicians chatted in 33% of all sessions and 83% of the counselors chatted at least once in their sessions.
Frequency of ‘chat’ by treatment condition: CTN MET vs. CAU
Frequency of ‘chat’ by treatment condition: CTN METS vs. CAU
Correspondence of Adherence Ratings

Summary

• Clinicians say they use a host of techniques with their clients that are characteristic of MI, CBT, TSF, and other EBP, but they may rarely use them.

• At times clinicians initiate discussions with their clients that are not relevant to treatment.

• Clinicians may be prone to believe they are implementing EBP techniques when they have not done so.

• Large training gaps raise concerns about the integrity with which clinicians deliver EBP in private CTPs.

We need to effectively train clinicians to implement EBP
Training Strategies

• Manuals/Written Materials
• Workshops and Seminars
• Clinical Supervision
• Distance Learning
• Blended Approaches
Manuals/Written Materials

- Mental Health Treatment
- Addiction Treatment
Workshops
Clinical Supervision
Competency-Based Approaches

- Explicitly identify the knowledge, skills, and values that form the basis of competence in a particular EBT

- Use specific learning strategies and evaluation procedures to sequentially build the counselors’ skills appropriate to their clinical settings

Core Elements

• Direct observation of treatment sessions

• Structured performance feedback about counselors’ treatment adherence and competence

• Coaching to improve the ability of counselors to implement EBP proficiently
Clinical Supervision: Landmark Studies


WF, WC, & WFC > Workshop = STC at 4 months \((p < .005);\) Miller et al. (2004)
No significant increase except in WFC; Miller et al. (2004)
Recent Literature Reviews


“Workshop follow-ups that include observation, feedback, consultation, and/or coaching have improved adoption of the [EBP], retention proficiency, and client outcome compared to workshops alone. Essentially, there does not seem to be a substitute for expert consultation, supervision, and feedback for improving skills and increasing adoption.” (p. 452)
Recent Literature Reviews


“Our review suggests that some mode of theoretical instruction seems integral in initial training, however, this may be provided through workshops, reading or web-based instruction, as along as it is followed by experiential and interactive training through practice cases, co-therapy, or supervision. Treatment adherence monitoring with feedback and instruction may be necessary to maintain competency gains.” (p. 512)
Recent Literature Reviews


“Although the evidence is far from complete, it indicates that ongoing training with supervisory support and rating-based feedback and coaching – spaced over time and individualized to the counselor’s training needs – is effective.” (p. 38)
Motivational Interviewing Assessment: Supervisory Tools For Enhancing Proficiency

Adherence and Competence Rating System

10 MI Consistent Items
- MI Spirit
- Open Questions
- Reflections
- Affirmations
- Fostering Collaboration
- Motivation to Change
- Developing Discrepancies
- Pros, Cons, and Ambivalence
- Client-centered Discussion/Feedback
- Change Planning

5 MI Inconsistent Items
- Unsolicited Advice
- Direct Confrontation
- Asserting Authority
- Emphasis on Abstinence
- Powerlessness/Loss of Control

Adherence = How Often (1-7 scale)
  Fundamental = .88
  Advanced = .87
MI Inconsistent = .91

Competence = How Well (1-7 scale)
  Fundamental = .87
  Advanced = .68
2 Rating Dimensions

**Adherence** – How often a particular intervention or strategy occurs. Items rated from 1 (Not at all), to 7 (Extensively)

**Competence** - The quality of the intervention or strategy. Items rated from 1 (Very Poor), to 7 (Excellent)
Sample Item: Adherence

**PROS, CONS, AND AMBIVALENCE:** To what extent did the clinician address or explore the positive and negative effects or results of the client's substance use and what might be gained and lost by abstinence or reduction in substance use? To what extent did the clinician use decisional balancing, complete a cost-benefits analysis, or develop a list of pros and cons of substance use? How much did the clinician express appreciation for ambivalence as a normal part of the change process?

**Adherence Rating Guidelines:**
This item focuses on the extent to which the clinician facilitated the discussion of specific consequences of the client's substance use. This may include the positive or negative results of the client's past, present, or future behaviors as related to active substance use. Specific techniques used include decisional balancing, a cost-benefits analysis, or listing and discussing the pros and cons of substance use. An important stylistic component accompanying these techniques is the clinician’s reflection of the ambivalence inherent in the client’s decisional dilemma.
Sample Item: Competence

**Higher:** The clinician approaches the task in a nonjudgmental, exploratory manner. Throughout the examination of pros and cons, the clinician prompts the client to continue detailing dimensions of ambivalence using open-ended questions or reflections about consequences previously noted by the client. Full exploration of the pros and cons of stopping substance use versus continuing use improve quality ratings. During this process, the clinician elicits responses from the client rather than suggesting positive and negative consequences as possibilities not previously mentioned by the client. Additionally, use of summary reflections within each dimension or comparing and contrasting them may enhance the Skill Level ratings, particularly when the clinician uses these discussions to tip the client’s motivational balance to the side of change.

**Lower:** The clinician seldom provides the client with opportunities to respond freely to the pros/cons dimensions or to more thoroughly elaborate on meaningful pro and con areas. Instead, the clinician provides the client with likely pros and cons and asserts this view to the client in a more closed-ended fashion. Consequently, the client becomes more of a passive recipient rather than an active participant in the construction of the decisional balance or discussion of factors underlying the client’s ambivalence. Lower ratings also occur when the clinician asks the client to list pros and cons one after the other without exploring details or the personal impact of substance use on the client’s life. When summarizing the client’s pros, cons, or ambivalence, the clinician does not involve the client in the review and simply restates the items in a mechanical or impersonal manner. The clinician makes no effort to strategically tip the client’s motivational balance in favor of change.
Clinician: Well, to kinda summarize at this point, you got 2 DUIs and that concerns you. I mean, you know, you don’t like doing that. You don’t like driving that way. You don’t like driving under the influence. Having to go to an attorney and deal with all this is something you wouldn’t want to do.

Reflection – good

Developing Discrepancy – good
Client: Well, it’s expensive and inconvenient to say the least. And I don’t like having that on my record because I’m not that guy. I’m not the guy who drinks and drives.

Clinician: Like you said, that’s not your normal behavior nor something you would normally do.

Reflection – good
Developing Discrepancy – good
Client: No.

Clinician: And you’re also concerned about having to rely on it. Like you said, you play in a band…you get those tunes going through your head and it’s something you’ve come to rely on to get you to sleep. And that’s not so much something you thought but something your girlfriend has pointed out to you.

Reflection – good

Developing Discrepancy – good
Client: Well, she’s kinda got me thinking about it a little bit, and I’m realizing I’m sounding kinda like a jerk talking like the only reason I am here is because of my lawyer or to just make my girlfriend relaxed. I don’t want you to think that.

Clinician: You’ve got some concerns about this yourself. You’re kinda thinking well maybe there’s something about this I need to look at myself.

Reflection – very good
Fostering Collaboration – very good
Client: You don’t want stuff like this to get to a point where it’s a problem. I’m kinda heading it off at the pass, you know what I mean? Trying to sort of look at it in a pre-problem stage…maybe determine, is this a problem or is it not a problem? Like I said, both times I got pulled over for DUIs, I didn’t feel like I was impaired at all.

Clinician: I gotcha. Your assessment right now is that it’s not a serious issue. However, you have some concern that it could develop into one.

Reflection – very good
Pros, Cons, and Ambivalence – very good
Client: You said assessment. That’s a good word. That’s actually kinda what I’m trying to do here.

Clinician: Try to figure some stuff out for yourself. And you mentioned your girlfriend having a concern about relying on it in the evening. What other concerns does she have or that you have?

Reflection, Fostering Collaboration, Open Question, Motivation to Change
<table>
<thead>
<tr>
<th>Rating Item</th>
<th>Frequency &amp; Extensiveness</th>
<th>Skill Level Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. MOTIVATIONAL INTERVIEWING STYLE (p. 13)</td>
<td>Acceptable</td>
<td></td>
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<tr>
<td>OR SPIRIT</td>
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<td>2. OPEN-ENDED QUESTIONS (p. 16)</td>
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<td>3. REFLECTIVE STATEMENTS (p. 18)</td>
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<tr>
<td>4. AFFIRMATION OF STRENGTHS AND CHANGE EFFORTS (p. 20)</td>
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<td></td>
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<tr>
<td>5. FOSTERING A COLLABORATIVE RELATIONSHIP (p. 22)</td>
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<td></td>
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<td>6. MOTIVATION TO CHANGE (p. 24)</td>
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<tr>
<td>7. DEVELOPING DISCREPENCIES (p. 26)</td>
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<td></td>
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<tr>
<td>8. PROS, CONS, AND AMBIVALENCE (p. 28)</td>
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<td></td>
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<td>9. CHANGE PLANNING DISCUSSION (p. 30)</td>
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<td></td>
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<tr>
<td>10. CLIENT-CENTERED PROBLEM DISCUSSION AND FEEDBACK (p. 32)</td>
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<tr>
<td>MI Consistent Items</td>
<td>Adherence Rating</td>
<td>Competence Rating</td>
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<tr>
<td>--------------------------------------------</td>
<td>------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td>NA 1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>MI Style or Spirit</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Open-ended Questions</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Affirmations of Strengths &amp; Self-efficacy</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Reflective Statements</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Fostering Collaboration</td>
<td>X</td>
<td>X</td>
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<td>X</td>
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<tr>
<td>Pros, Cons and Ambivalence</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Change Planning Discussion</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Client-centered Problem Discussion and Feedback</td>
<td>X</td>
<td>X</td>
</tr>
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<td>Competence Rating</td>
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<td>-------------------------------------------</td>
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</tr>
<tr>
<td></td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>Unsolicited Advice, Directions &amp; Feedback</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Emphasize Abstinence</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Direct Confrontation</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Powerlessness, Loss of Control</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Asserting Authority</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Closed-ended Questions</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
### Strengths Demonstrated in Session

1. Very good MI style/spirit (collaborative, supportive, attentive, evoked change talk, and followed client’s lead)
2. Very good reflective listening skills (reflection of both change talk and resistance draws out some ambivalence and how bothered client is about DWI).
3. Good use of directive strategies (asks evocative questions, develops discrepancies, uses decisional balance activity.
4. Eliminates MI inconsistent strategies and uses closed-ended questions relatively infrequently.

### Skill Development

<table>
<thead>
<tr>
<th>MI Skill Targeted for Improvement</th>
<th>What specifically will be developed or improved?</th>
<th>How will the goal be reached?</th>
</tr>
</thead>
<tbody>
<tr>
<td>MI style/spirit and reflections</td>
<td>• Decrease use of repetitive statements such as “I gotcha” or “I follow ya” as a means of indicating understanding or as a prelude to reflecting</td>
<td>• Heighten awareness about this tendency and practice reflecting without using repetitive statements in the next practice session. • Identify and practice alternative ways to demonstrate understanding.</td>
</tr>
<tr>
<td>Affirmations of strengths &amp; self-efficacy</td>
<td>• Increased use of affirmations</td>
<td>• Read the OARS Tool and the Affirmations Self-Assessment Skill Summary. • Role-play with supervisor to identify instances when affirming the client may be an effective MI strategy.</td>
</tr>
<tr>
<td>Reflective Summaries</td>
<td>• Link together client’s mixed statements about his substance use</td>
<td>• Practice summarizing client’s ambivalent statement made from session’s beginning to end. • Read and discuss how summaries help interview.</td>
</tr>
</tbody>
</table>
Teaching Tools

1. MI Style and Traps
2. MI Assessment Sandwich
3. MI Principles
4. Using Your OARS
5. Stages of Change
6. Reflections
7. Exploring Ambivalence
8. Eliciting Change Talk
9. Assessing Readiness to Change
MI Training Strategy Study

12 CTPs randomized to training condition

Self-Study  
N = 31

Training Materials Only

Expert  
N = 32

15-hour Workshop Training  
(delivered within 1 week)

Supervision (maximum = 3)  
Monthly rated recorded sessions with feedback and coaching

Train-the-Trainer  
N = 29

Participating Programs
MI Knowledge

![Graph showing MI Knowledge progression over time with conditions EX, TT, SS.]
Client Sessions

Adherence

Competence

Condition
- EX
- TT
- SS
Role Played Sessions

Adherence

Competence

Condition

- EX
- TT
- SS
Expert & Train-the-Trainer Strategies

Client Sessions

Role Played Sessions

Interest, Confidence, and Commitment to Using MI

Interest in Learning
Confidence in Ability
Commitment to Using
Cost Effectiveness

The cost of training clinicians must be weighed against the degree of benefits expected from them.

Without knowing the cost-effectiveness of different approaches for training clinicians in evidence-based practices, program directors and policy-makers have little guidance in deciding if expenditures on training initiatives are:

Sample

• Based on the subsample of clinicians who did not meet independently-rated adequate MI performance standards at baseline (n = 58; 22 in SS, 17 in EX, 19 in TT)

• To allow direct comparison of training costs across programs and conditions, the actual economic costs were normalized assuming 8 clinicians per program (the median and modal number per program in the trial)

• For effectiveness, we used % meeting adequate performance standard in client sessions at 12-wk follow-up as effectiveness measure, again based on those who did not meet standards at baseline and normalized to 8
Total Normalized Costs

- **Self-study costs** (clinician and expert time, space, materials/equipment, clinician time reviewing training materials)  
  $7,894

- **Expert costs** (clinician and expert time in workshop and supervision, expert travel time, mileage, rating tapes, materials, clinician time reviewing training materials)  
  $44,839

- **Train-the-Trainer costs** (same as expert plus the addition of additional workshop, trainer certification, trainer support)  
  $59,993
Results: CEACs (1 training)

(a) Probability of being cost-effective

Expert (EX)
Self-Study (SS)
Train-the-Trainer (TT)

Threshold ($)

0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
Results: CEACs (25 trainings)
Clinicians proceed to the next step of training if they fail to perform MI adequately after receiving a training step.
Pilot Study Findings

• Clinicians who showed inadequate MI performance immediately after taking the Web course and who subsequently participated in a workshop or supervision improved their adherence to fundamental MI strategies over time.

• Clinicians who performed MI adequately following the Web course continued to demonstrate similar levels of fundamental and advanced MI adherence and competence over a 24-week period without additional training.

• Clinicians who showed inadequate MI performance before training were more likely to improve their adherence and competence with training than those who already performed MI adequately.

• Different training strokes for different kinds of folks.

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Different training strokes for different kinds of folks.


Coming Attractions
Does Supervision Work and How?

MIA: STEP vs. SAU

Clinician MI Integrity

Client Outcomes
MIA: STEP Supervision Study

4-6 Clinicians

- MIA: STEP supervision for 7 client MI intakes
- Supervision-as-Usual for 7 client MI intakes
  - Post-trial assessment
  - 16-week post-trial assessment

28-42 Clients

- MIA: STEP supervised MI intake
- Supervision-as-Usual monitored MI intake
  - 4-week follow-up assessment
  - 12-week follow-up assessment
Study Implementation

Wave 1 (CTP 1, 2, 3)
Wave 2 (CTP 4, 5, 6, 7)
Wave 3 (CTP 8, 9, 10, 11)

Months

(1-8) 9 12 15 18 21 24 27 30 33 36 39 42 45 48 51 54 57 60
In-Home Messaging Devices

The Health Buddy® appliance

The Viterion V100 appliance
My drug use while I was pregnant
Everyone is different

Which sentence best describes your drug use while you were pregnant?

A. I used about as much as I always do.
B. I cut down a little.
C. I cut down a lot.
D. I quit completely while I was pregnant.
A Randomize Trial of “Peedy” with Postpartum Women (4-month follow-up)

Computer-Based Treatment for Cognitive Behavioral Treatment

CBT4CBT consists of seven 1-hr interactive video-based modules:

- Understanding/changing patterns of substance use
- Coping with craving
- Refusing offers of drugs and alcohol
- Problem-solving skills
- Identifying and changing thoughts about substance
- Improving decision-making skills
- HIV risk reduction


Carroll et al. (2009). Enduring effects of a computer-assisted training program for cognitive behavioral therapy: A 6-month follow-up of CBT4CBT. *Drug and Alcohol Dependence, 100*:178-181
Participants reported high levels of satisfaction with CBT4CBT.

Compared with those assigned to CAU alone, participants assigned to CBT4CBT+CAU submitted significantly fewer drug positive urine specimens and had significantly longer periods of sustained abstinence during treatment.

Those assigned to CBT4CBT had a significantly greater increase in the quality of their coping responses and this mediated the outcomes.

Those assigned to CAU increased their substance use while those assigned to CBT4CBT plus CAU tended to decrease their use slightly over the 6-month follow-up period.