Simple but not easy: What we know about how motivational interviewing works

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Motivational Interviewing is an Empirically Supported Treatment

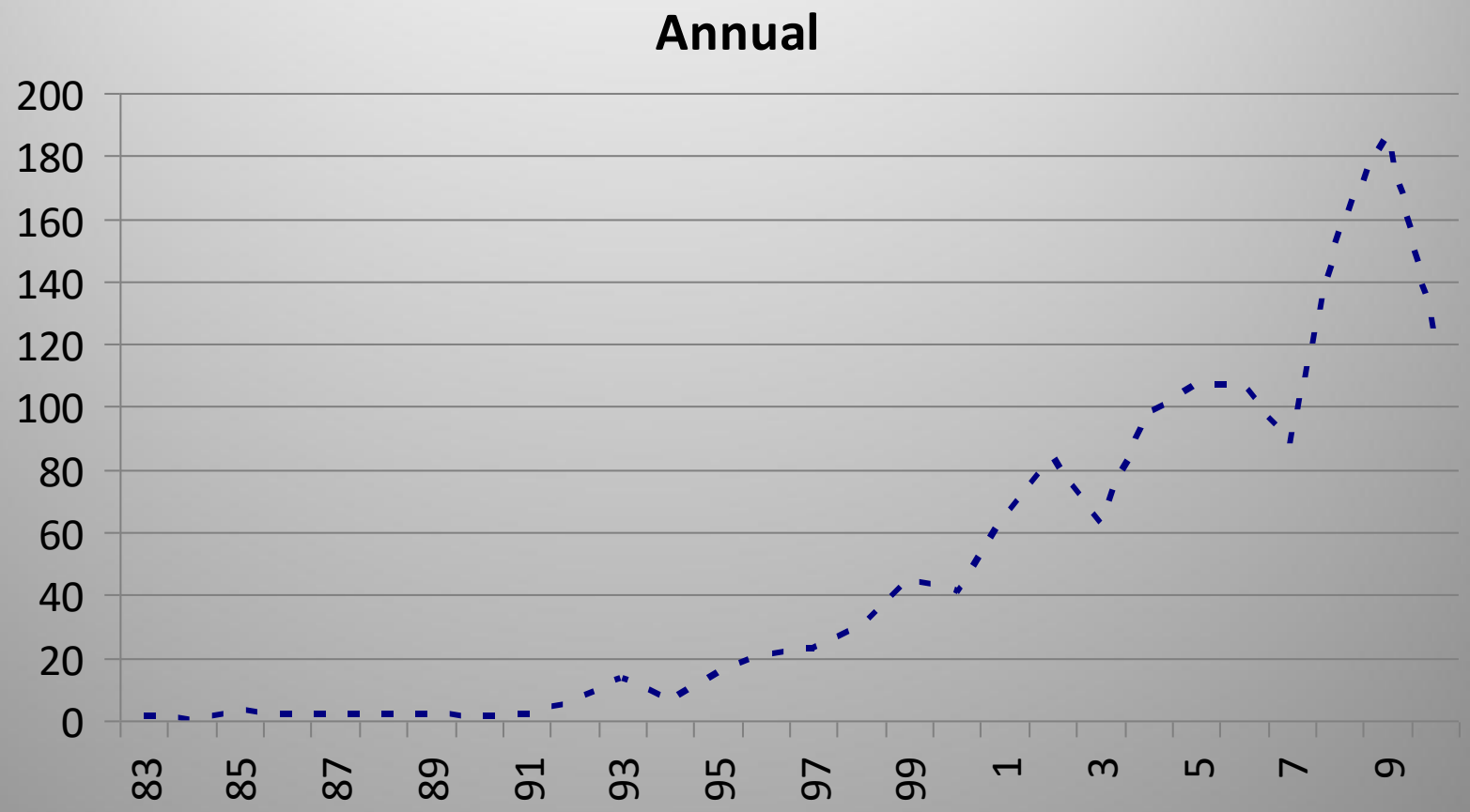
- More than 200 Randomized, Controlled Studies of MI
- Most yield small to medium effect sizes immediately following treatment, which diminish during the follow up period
- Size of treatment effects highly variable

MI likely to be widely used in foreseeable future

- Increased emphasis in public settings in U.S. to reimburse only those treatments that have empirical support
- More than 47 (of 50) U.S. states now designate MI among those treatments which are eligible for reimbursement with public dollars

- Scholarly research concerning MI continues to grow

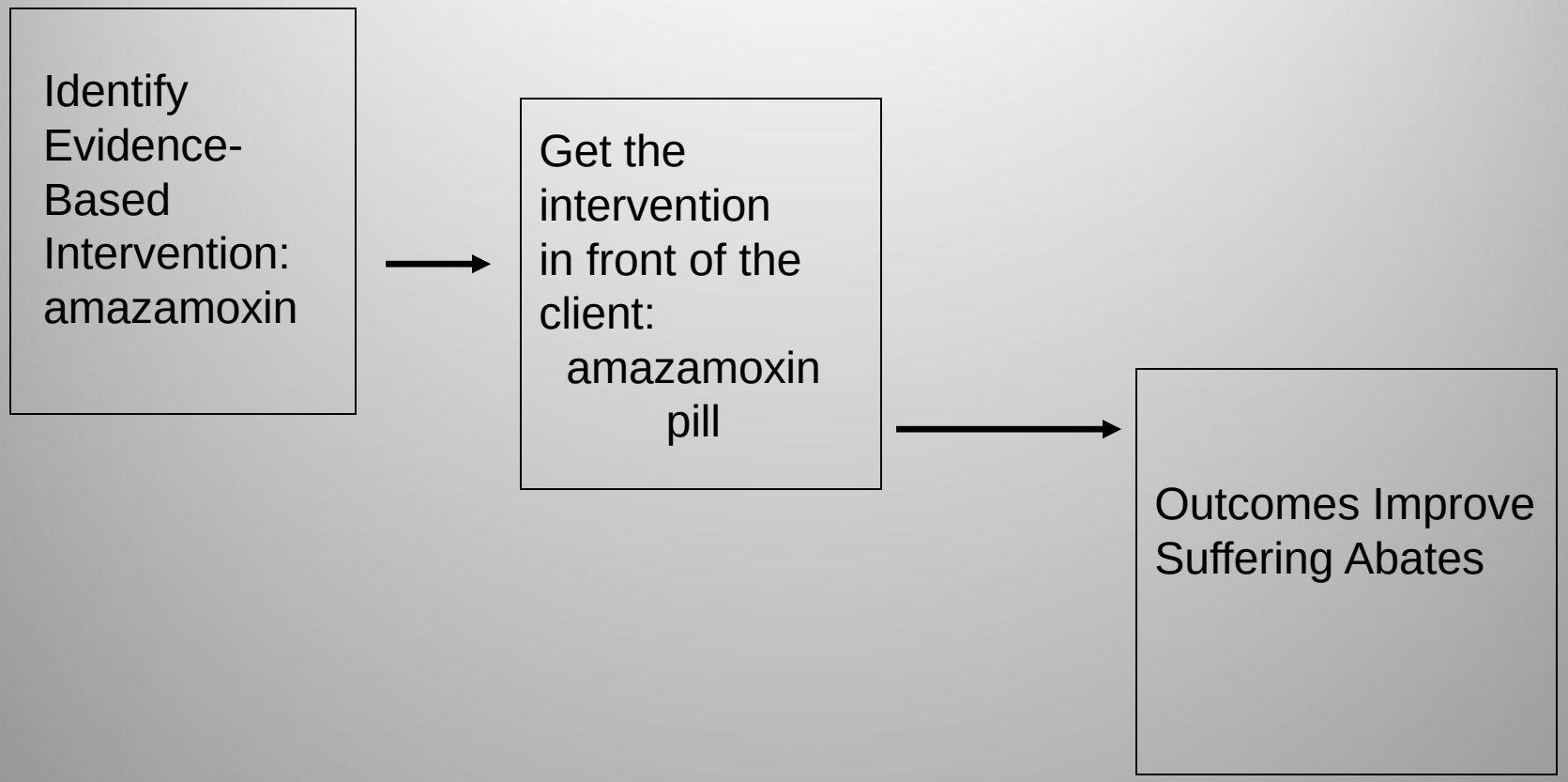
Scholarly Publications Per Year : Motivational Interviewing



Dissemination Dilemma

Dissemination of MI

- Systems now faced with urgent demands to integrate MI into existing structure of care *because* it is an empirically-supported treatment
- Logic is that disseminating MI will improve client outcomes and reduce suffering
- So far this logic is similar to that of disseminating, for example, a new antibiotic


Identify Evidence-Based Intervention: amazamoxin
Get the intervention in front of the client: amazamoxin pill
Outcomes Improve Suffering Abates

How is it different when we are disseminating motivational interviewing?

- MI has both a relational and technical component
- Technical component is differential attention to client language about change
- Relational component is attention to the quality of the clinician's interactions with the client – they occur within a specific context of partnership, acceptance and evocation

- The clinician comes into greater focus in the delivery of psychosocial treatments more generally, and motivational interviewing especially

Clinician Effects

- Substantial empirical evidence indicating that clinicians are accounting for a significant portion of outcome in behavioral and psychosocial treatments

- In fact, one of the best predictors for how well clients will do in after behavioral interventions is which clinician they have

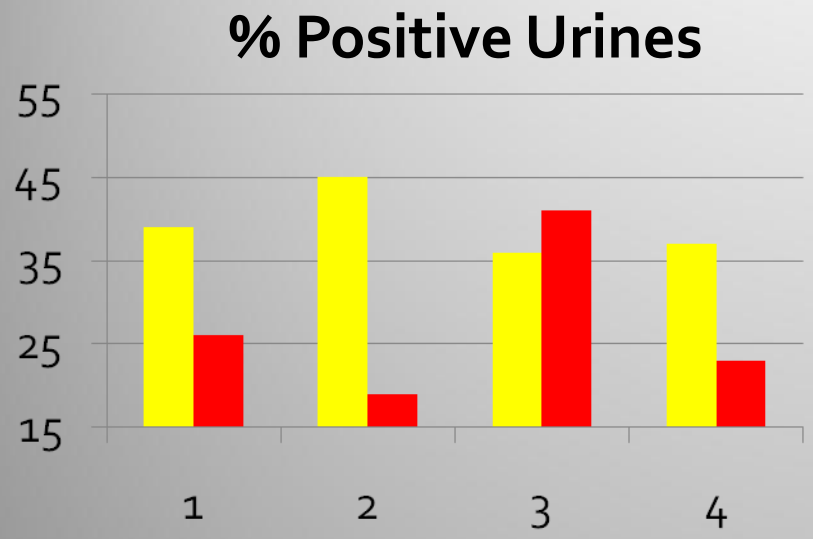
Within the substance abuse treatment field more specifically, relatively strong evidence for impact of clinicians in client outcomes

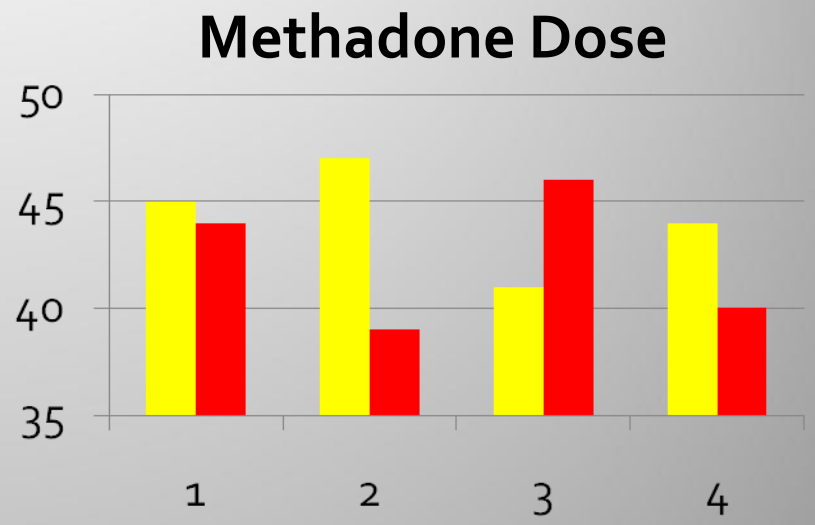
Differences in Client Drug Use Outcomes By Clinician

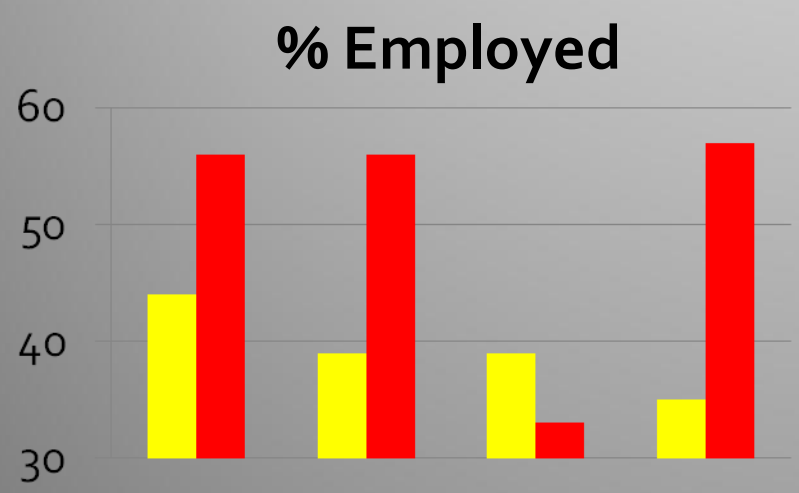
- **Two drug treatment counselors resigned**
- **Their 62 cases were assigned randomly to the four remaining counselors**
- **There were dramatic differences in client outcomes.**

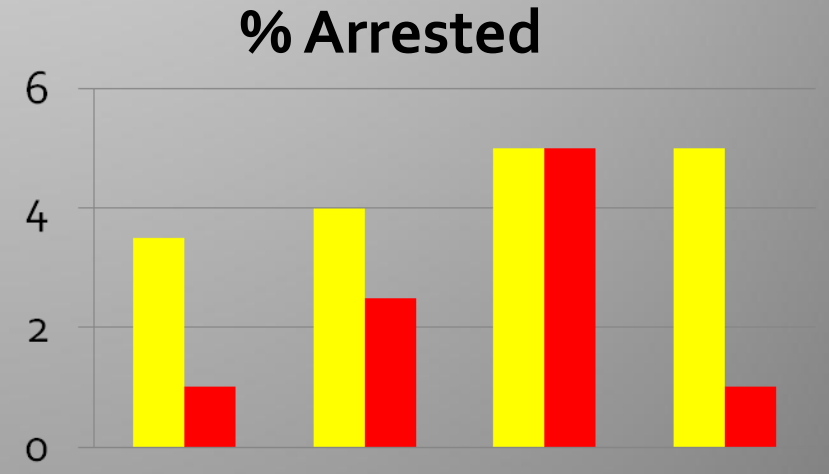
McLellan et al., 1988 *Journal of Nervous and Mental Disease, 176,* 423-430.

Client Outcomes Before and After Random Reassignment to a New Counselor









McLellan et al. (1988). *Journal of Nervous and Mental Disease, 176, 423-430.*

What about in carefully conducted clinical trials?

- Project MATCH: clinicians accounted for 12% of variance in client drinking outcomes
- With the removal of one very poorly performing clinician amount of variance accounted for decreased to 3%
- We might get further by paying attention to removing iatrogenic clinicians

COMBINE Research Study

Conducted in 11 U.S. cities

Sponsored by the National Institute on Alcohol Abuse and Alcoholism (NIAAA)

Testing Medications

- Naltrexone
- Acamprosate

Two Behavioral Treatments

- Medication Management
- ***Combined Behavioral Intervention (CBI)***

The Study Sample

- 1,383 patients
- 69% male, 31% female
- Average age of 44
- 42% married or cohabiting
- 73% employed
- 24% from ethnic minority groups

The Combined Behavioral Intervention (CBI)

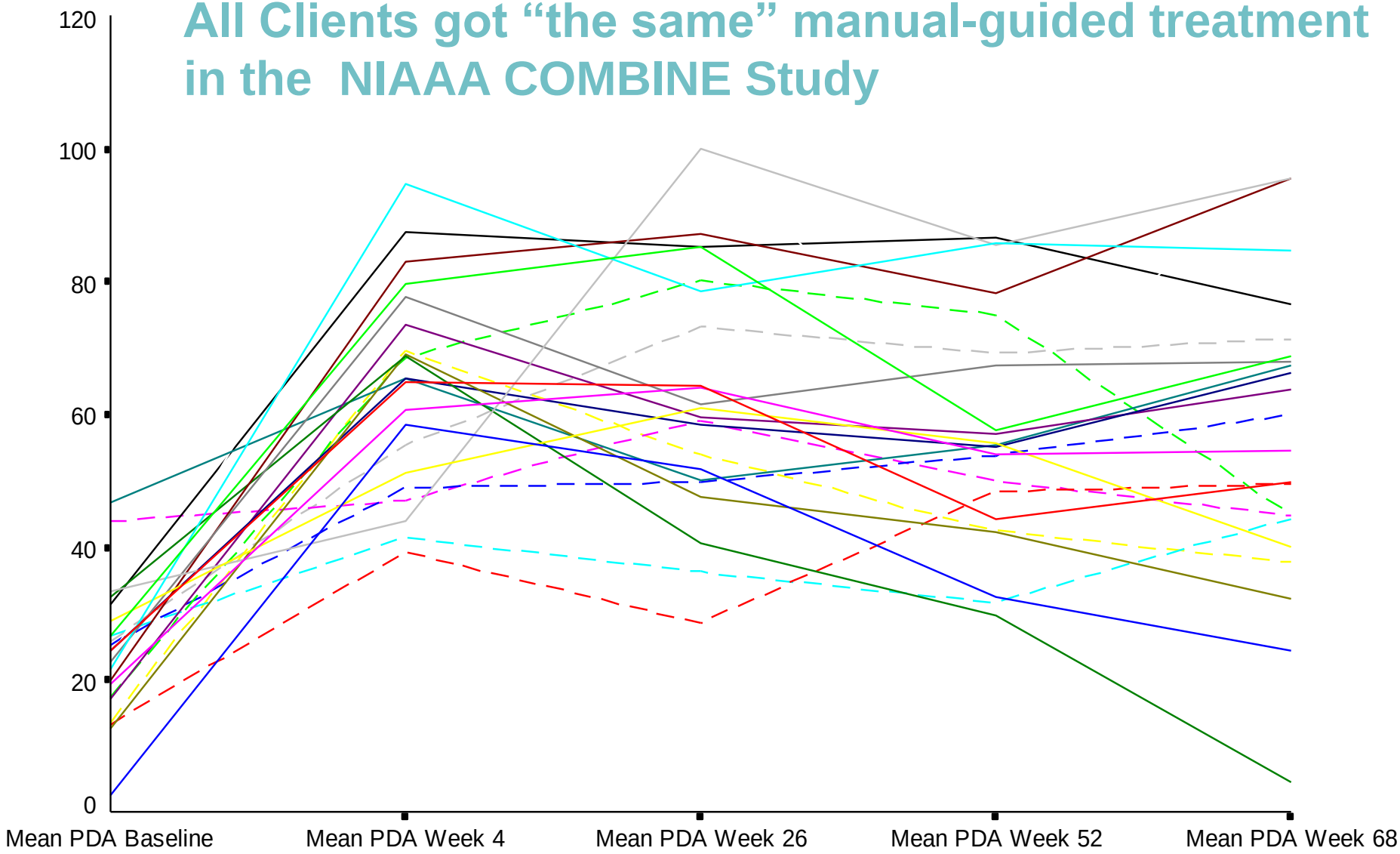
- Was developed for the COMBINE Study
- As a state-of-the-art counseling method
- Combining elements of several treatments previously found to be effective
- Manual guided, monitored and supervised
- Up to 20 individual sessions over 4 months
- With ≥ master's level specialist counselor

CBI Combines:

- Motivational interviewing
  - Both the first intervention
  - Style is foundation for the rest of the intervention
- Cognitive Behavioral Treatment
- Encouragement to make use of Alcoholics Anonymous mutual-help groups
- Involvement of a supportive significant other

- In this highly standardized, carefully monitored intervention with meticulously detailed therapeutic procedures…..

Individual Therapist Outcomes for Combined Behavioral Intervention



- In the Combine Research Study, clinicians are accounting for about 10% of the variance in drinking outcomes

If Clinicians are so important, what is it that they are doing that makes the difference?

It isn’t…

- Clinician sex, level of education, professional background, years of experience, recovering status, introversion/extroversion or theoretical orientation

So, what might account for these differences?

- One candidate explanation is the clinicians level of interpersonal skill
  - Specifically, clinician empathy

Clinician Empathy

- Defined as the ability to convey understanding of the perspective of another
- Implicated in successful human relationships more generally and psychotherapy more specifically

» Elliot, Bohart, Watson & Greenberg (2011)

- A component of therapeutic alliance which is linked to outcomes across a variety of behavioral problems and across theoretical approaches

- Enough empirical support in the psychotherapy literature to be considered an evidence based component of therapy (Norcross & Wampold, 2011)

Self-Determination Theory
Ryan & Deci (2008)

- “autonomy support…begins most crucially with understanding and validating clients’ internal frame of reference. Respect for people’s experience does not entail endorsement of their values or behaviors, but rather represents a thorough attempt to grasp how individuals see the situation…”

Clinician Empathy in the Combined Behavioral Intervention

- Clinicians pre-screened for empathy before being selected for study; all sessions recorded
- Randomly sampled and reviewed throughout trial
- Rated for both treatment content and process (including empathy)

- 567 clients (level 1)were nested within 37 therapists (level 2)
- Therapists had between 1 and 39 clients
- Empathy
  - Observer ratings of therapist empathy for each client, rated on a 1-7 scale
  - Ranged from 4-7, average rating = 5.9
- Dependent variable: Client drinks per week at end of treatment

Multilevel Model Nested Design

ICC = 0.10; 10% of the variability in client drinking is accounted for at the therapist level

- Therapist empathy is significantly associated with client drinking, such that therapists exhibiting more empathy have clients who drink less ($\beta = -0.29$, $p < 0.05$) at the end of treatment
  - Random intercept and random slope for empathy

What about treatment content?

- Selected 3 most commonly used CBI modules

- 3 CBI modules:
  - Coping with cravings and urges, 61%
  - Mood management training, 50%
  - Social and recreational counseling, 28%

Is there a relationship between CBI modules and client drinking?

- Coping with cravings module did not predict client drinking at end of treatment ($\beta = -0.40$, $p > 0.05$, n.s.)
- Both Mood management ($\beta = -0.56$, $p < 0.01$) and Social & Recreational counseling module predicted reduced drinking ($\beta = -0.64$, $p < 0.001$)
- In each case, empathy was still a significant predictor of client drinking, independent of modules

Implications for delivering MI

- When giving amazamoxin, the delivery vehicle (pill) is inert and standardized

But in Motivational Interviewing, the delivery vehicle is

- Very influential in its own right
- Unpredictable, variable and sometimes makes things worse
- In other words:

Your Average Clinician

We cannot disseminate MI without:

- Selecting and training clinicians in the relational component of the method
- Monitoring clients to guard against iatrogenic effects of clinicians

What about the technical component of MI?

Change Talk

- Recognizing, Eliciting and Responding selectively to the client's language about change

- We know that change talk is associated with improved client outcomes

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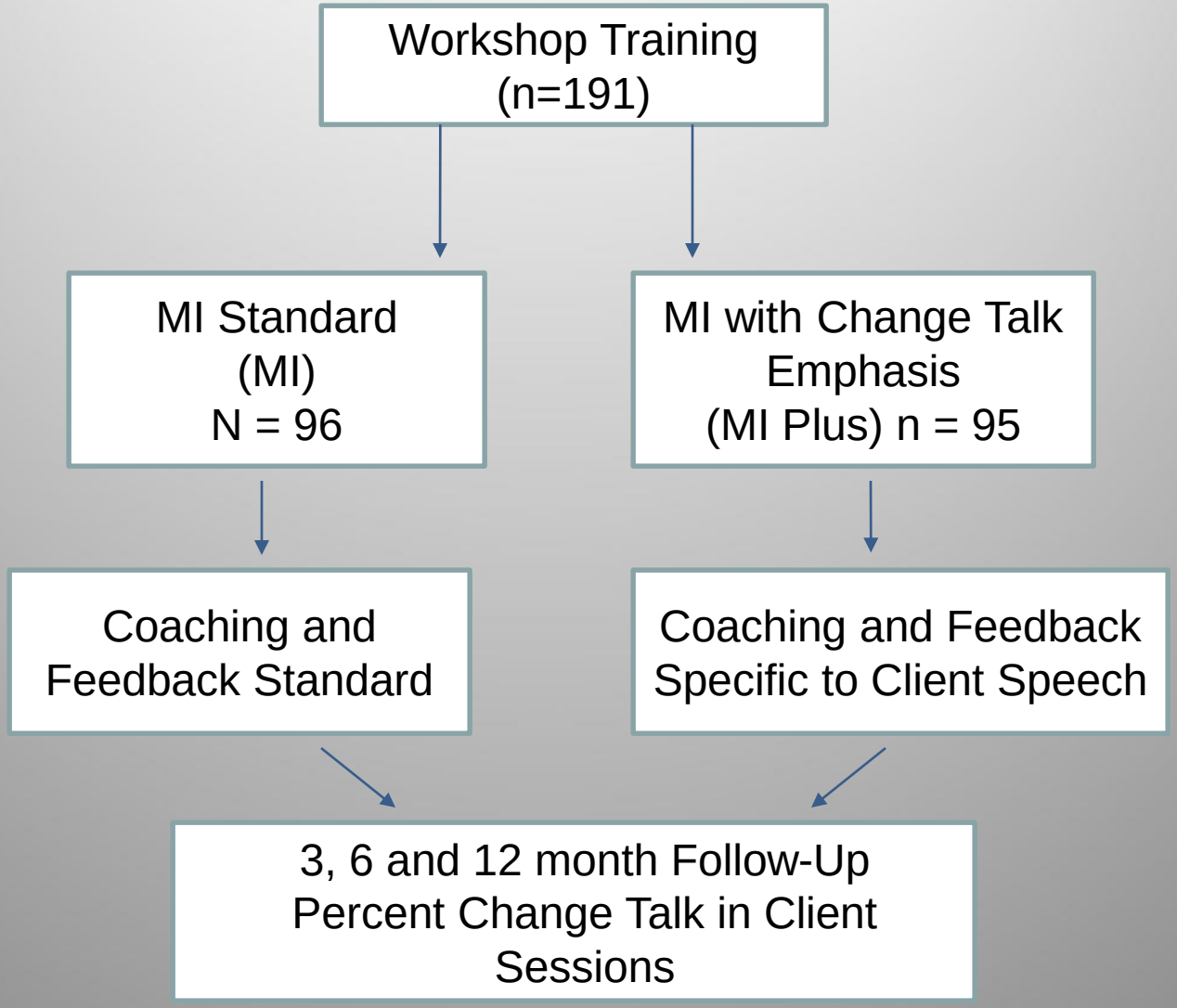
- We know that clinicians can intentionally evoke change talk
- We know that certain behaviors of clinicians are more likely to bring change talk than others

Can we train clinicians to do this intentionally?

Can Counselors Evoke Change Talk?

- Training counselors in two different MI strategies:
  - "Plain" or "Pure" MI
  - "Change-Talk-On-Steroids" MI (MI+)
- Frontline substance abuse providers in public agencies
- Work samples at baseline, post training, 3, 6, 12 months
- Does change talk in clients differ depending on what clinicians have been taught?

Project Elicit: Evaluating Language In Clinician Interviewing Training



NIDA 021227

Results for post-training time point

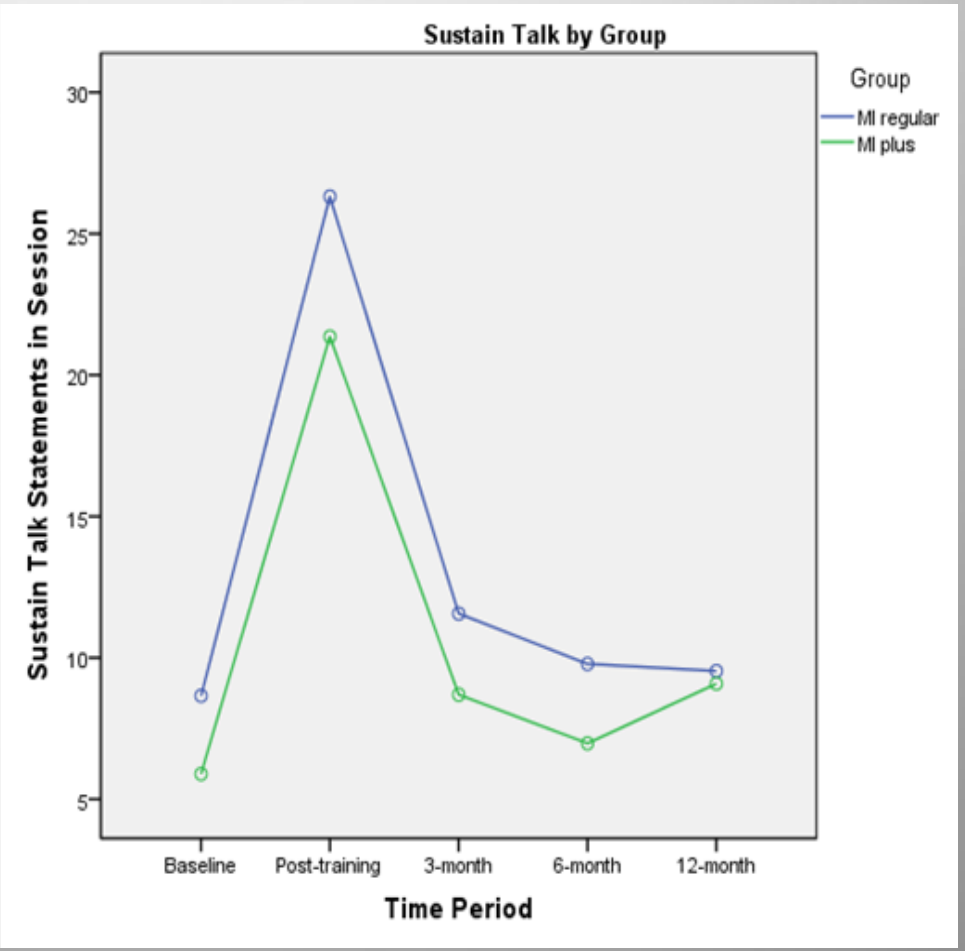
MI group $n = 78$,
MI+ group $n = 75$

No significant differences between groups in change talk

Significant difference between groups in sustain talk

HLM: $\beta = -0.177$, $p < .05$

MI group
mean = 25.05,
SD = 11.564
MI+ group
mean = 21.79,
SD = 10.333



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- What can be trained and what cannot be trained?

- We can train selective attention to change talk, but can we train empathy, autonomy support and collaboration?
- How long does this take?
- Do we have time for that?

A Modest Proposal

Clinician Selection

- For clinicians who will be asked to use motivational interviewing:
  - Screen for empathy using a standardized test
  - Hire (or select for MI) only those who pass a minimal “bar” for empathy

Clinician Selection

- This was the procedure used in Combine Research Study
- Clinicians submitted work sample
  - Recruited friend or colleague
  - Asked to Listen without trying to solve problem
  - “how I came to this field” or “what it was like growing up in my family”
- Conversation should last 20 minutes

Passing Score

- “pass” if the clinician gets at least one reflection for every question

and

- At least 50% open questions

- Of 68 candidates, 47 (69%) earned a passing score the first time
- Another 10 passed after a second attempt
- 11 never did
- This despite very high levels of education and experience in sample

- If we screened, would it tell us anything about how the person would practice later?

Does baseline empathy predict practice?

- Training studies for MI counselors
- Three studies over 10 years
  - Project EMMEE
  - AFTER Project
  - Project ELICIT
- More than 500 frontline substance abuse clinicians in every possible treatment setting

- All utilized same basic design
  - Baseline tape
  - Training (plus enrichments)
  - Follow up tapes
- All tapes reviewed using behavioral coding system(s) (MITI, MISC, SCOPE)
- Clinician empathy rated at all points
- Rated as global characteristic on 1-7 scale

- What if the baseline recording had actually been a pre-employment screening that some clinicians “passed” and others “failed”?
- Would it predict how they were with their clients later?

- Baseline empathy scores dichotimized into “pass” (4 or better) or “fail”
- Used to predict performance 3 months later

- Baseline empathy significantly predicts counselor empathy in 3 month work samples EVEN AFTER standardized workshop training in MI

Added burden for clinicians?

- Asking too much of clinicians already working very hard
- Systems may work against development of interpersonal skills and specifically empathy
- May lead to loss of employment for significant portion of counselors
- And yet….

- Study by Stewart, Chambliss & Baron (2011) Journal of Clinical Psychology
- What do clinicians perceive as barriers to learning empirically supported treatments?
- Most commonly endorsed barrier
  - “a good working relationship with my client is more important than learning how to do a specific treatment”

Conclusions

- Technical elements of MI are a very good start in investigating what makes it “work”
- Relational component at least as important
- Some evidence to indicate we can quantify and begin hiring based on ability to employ relational skills
- Important to do no harm

- Psychosocial treatment will be transformed within the next decade as we gain the ability to look behind the secret door
- Transparency is bringing entirely new levels of accountability to our field
- This is not something to be afraid of if we have research to show what makes clinicians “work” too

- Clinicians themselves may have the most incentive to anticipate, facilitate and empower this new accountability

- “Oh Brave New World, that has such creatures in it”
    - Shakespeare