

Motivational Interventions for Special Populations

Kathleen Carroll, PhD

Jose Szapocznik, PhD

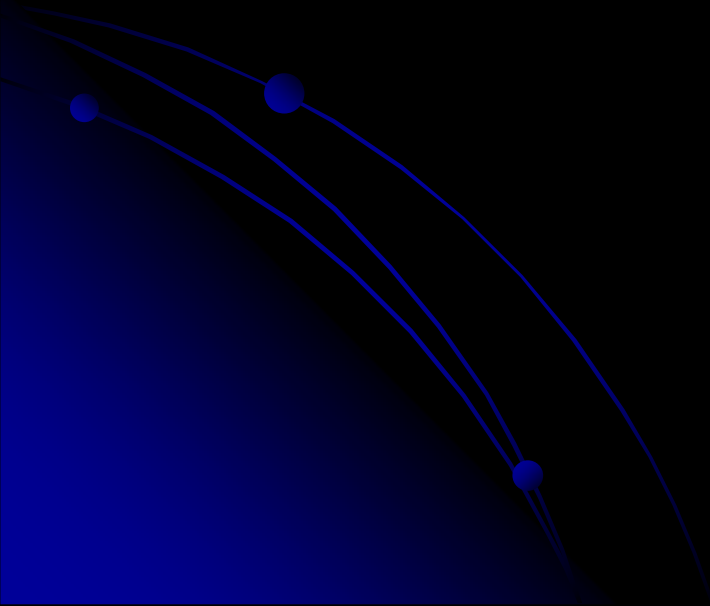
Antoine Douaihy, MD

Motivational Interviewing (MI) Overview of Theory, Principles, Training, and Targeting Special Populations

**Antoine Douaihy, MD
Associate Professor of Psychiatry
Medical Director
Addiction Medicine Services
Western Psychiatric Institute and Clinic
Appalachian Tri-State NODE of CTN
MINT
douaihya@upmc.edu**

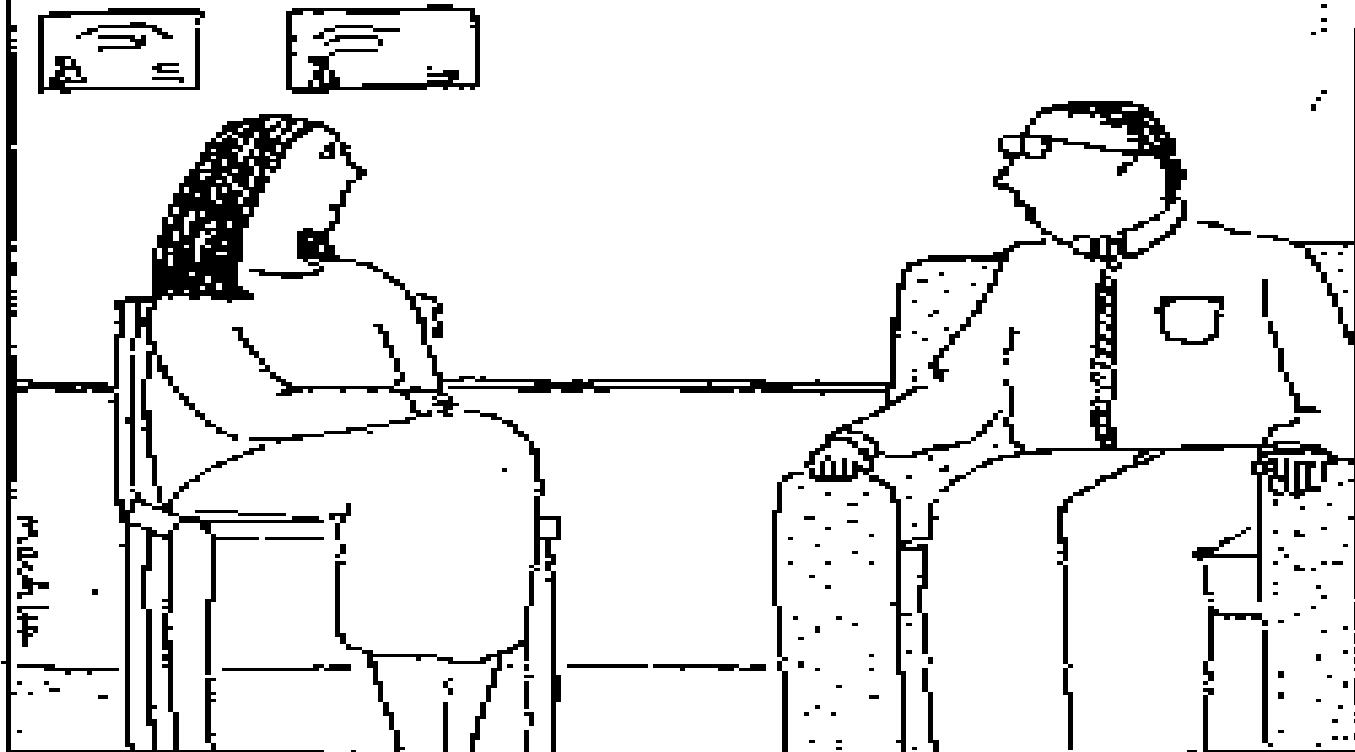
Disclosures

- AstraZeneca, NIDA, NIAAA: Research Support



QUALITY TIME *Gail Machlis*

Please, don't speak in vague therapist terms-- just tell me what to do with my life.



Machlis

Is this MI?

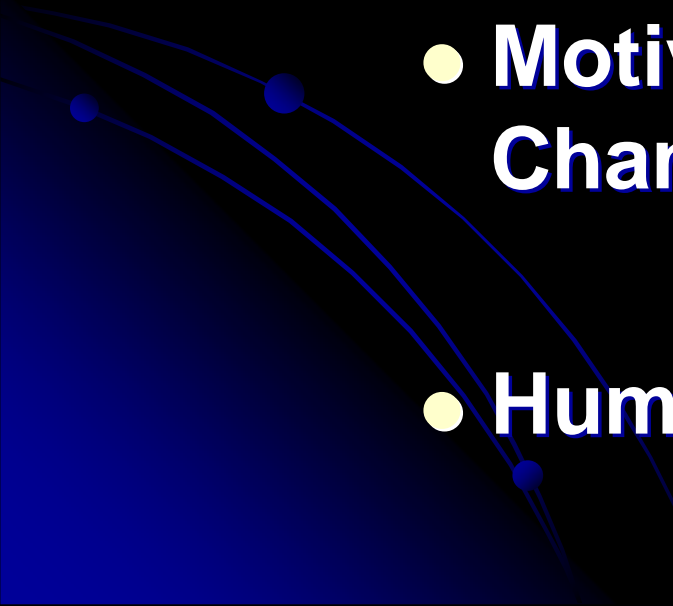


Acknowledgements

- Members of the Motivational Interviewing Network of Trainers (MINT)
 - Information about recent work and work-in-progress
 - Use and adaptation of slide materials
 - Insight into the history and development of MI
- Dennis C. Daley, PhD; Thomas Kelly, PhD
Ihsan M. Salloum, MD, MPH: Collaborators
in work on MI


BACKGROUND

Theory and Research

- **Experimental Social Psychology**
 - **Motivational Stages of Change**
 - **Humanistic Psychology**
- 

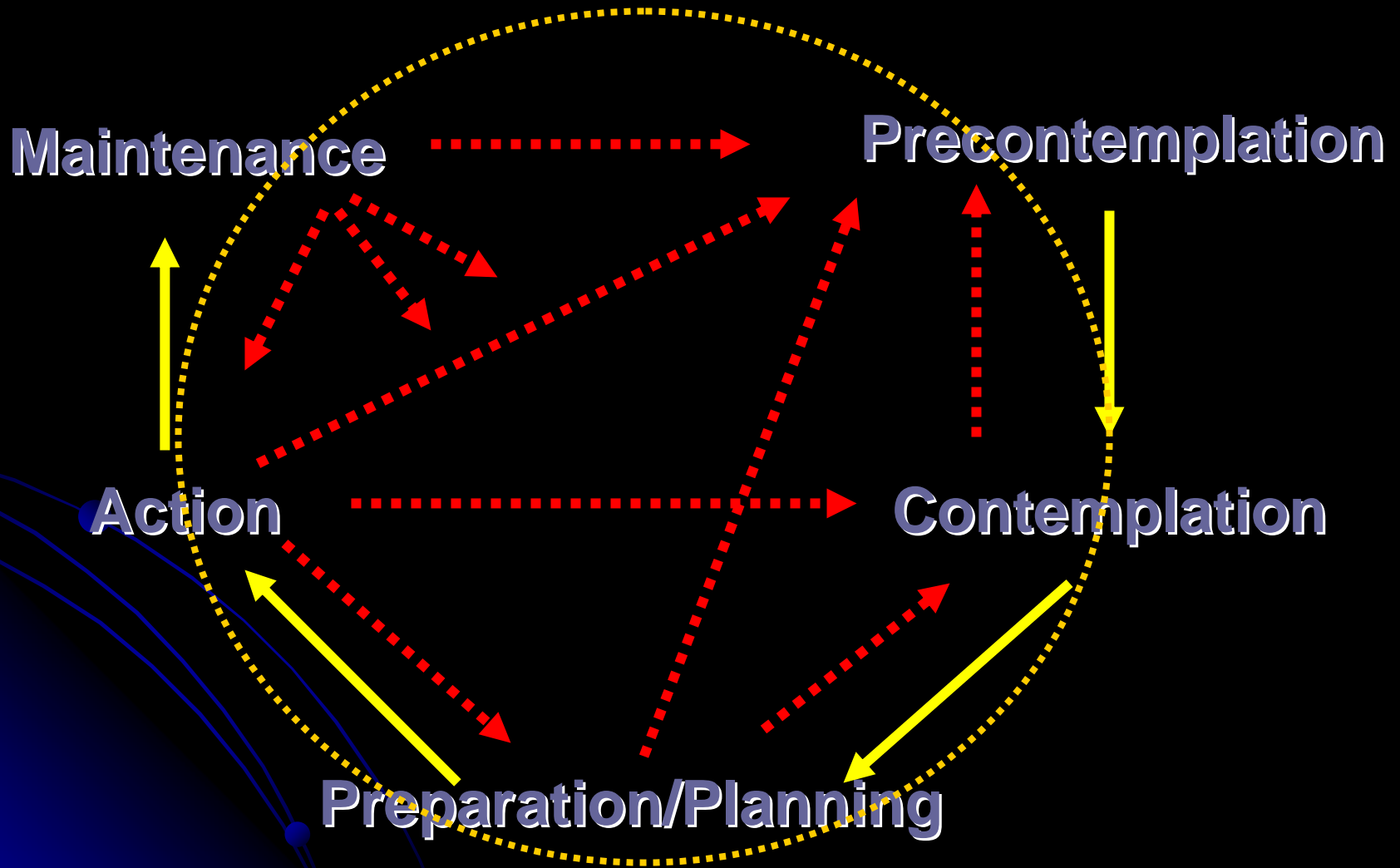
BACKGROUND

Experimental Social Psychology

- Causal Attributions
 - Cognitive Dissonance
 - Psychological Reactance
 - Self-Efficacy
- 

Transtheoretical Change Process

HOW PEOPLE CHANGE



BACKGROUND

Humanistic Psychology

- Individual, not Label
- Empathy, not Direction
- Client-centered, not Therapist-Driven
- Acceptance, not Confrontation

MODEL DEVELOPMENT & TESTING

Stages of Research

Stage I (Development)

- 1960's Supportive referral encouragement (Chafetz)**
- 1970's Simple advice and referral (Edwards)**

Stage II (Efficacy)

- 1980's Motivational Interviewing (Miller & Rollnick)**
- Drinker's Check-up (Miller & Sovereign)**

Stage III (Effectiveness/Multisite)

- 1990's Motivational Enhancement Therapy (MATCH; Miller et al)**
- 2000's WHO, Marijuana Treatment, Clinical Trials Network**

Principles of MI

- Express Empathy
 - Accurate understanding of the person's experience, communicated without judgment
- Develop Discrepancy
 - Distance between current state and goals, and/or current behavior and values
- Roll with Resistance
 - Defensiveness is a signal to respond differently
- Support Self-efficacy
 - Belief in ability to succeed at tasks undertaken

Spirit of MI

- **Autonomy**
 - Personal responsibility
 - Neither imposition nor coercion
- **Collaboration**
 - Meeting of aspirations
 - Neither exhortation nor persuasion
- **Evocation**
 - Drawing out
 - Neither instilling nor installing

Amrhein, Miller, Yahne, Palmer, & Fulcher, 2003

JCCP, 71: 862-878

- Psycholinguistic analysis of process in MI sessions for drug abuse treatment (MIDAS)
 - Desire: *"I want to do this."*
 - Ability: *"I can do this."*
 - Reasons: *"This will help me feel better."*
 - Need: *"I must do this."*
- DARN does not independently predict behavior change
- DARN predicts commitment language

Amrhein, Miller, Yahne, Palmer, & Fulcher, 2003

- Commitment Language

“I’m not planning to do this.”



“I might do this sometime.”



“I am going to do this now.”

- Increasing intensity of commitment language over the course of a session independently predicts behavior change

Other Process Findings

- Moyers, Miller, & Hendrickson, 2005—JCCP, 73: 590-598
 - MI-consistent interpersonal skills facilitate client involvement (affect, cooperation, disclosure)
- Moyers & Martin, 2006—JSAT, 30: 245-251
 - MI-consistent behaviors increased probability of client change talk (strongest predictor)
 - MI-inconsistent behaviors increased probability of client counter-change talk (strongest predictor)
- Karno & Longabaugh, 2005—JCCP, 73: 262-267
 - Among patients with medium/high levels of reactance, directiveness (interpretation, confrontation, introduction of topics) was associated with worse outcomes

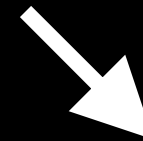
A Path Model of MI

MI

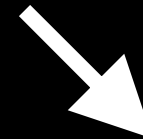
High Empathy
High Discrepancy
High Self-Efficacy
Low Resistance



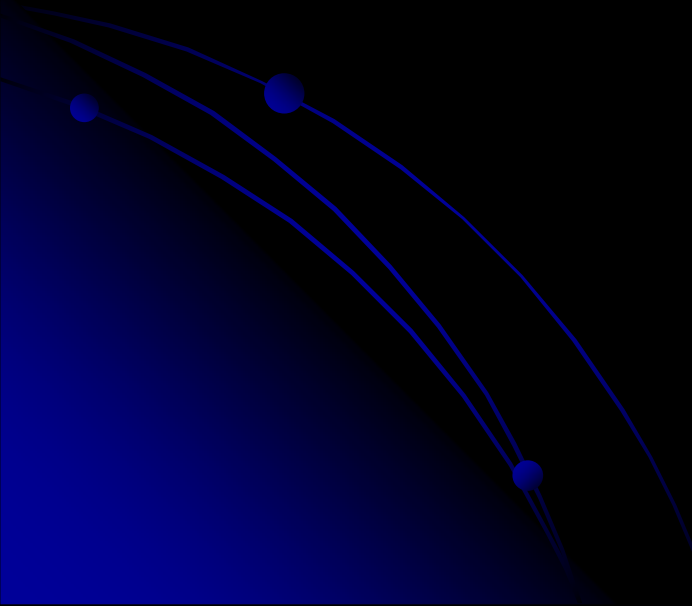
**Desire
Ability
Reasons
Need**



Commitment



Change



EFFICACY & EFFECTIVENESS

Subpopulations

- **Heavy or Problem Drinkers**
- **Alcohol Abuse or Dependence**
- **Heroin, Cocaine, Methamphetamine, Marijuana, and Polydrug**
- **Dually Diagnosed Patients**
- **Treatment adherence**
- **Adolescents**
- **Other Health Risk Behavior Groups**

MI TRAINING RESEARCH

Current Projects

- **Motivational Interviewing Network of Trainers (MINT)**
 - *University of New Mexico Center on Alcoholism, Substance Abuse and Addictions (CASAA)*
- **NIDA Behavioral Therapy Training Projects**
- **NIDA Clinical Trials Network Protocols**
- **Therapy Training Integrity Procedures**

MI TRAINING RESEARCH

Current State of Knowledge

- **Two-day training results in increased knowledge of MI and satisfaction with training procedures**
- **Training improves MI skills better than it suppresses non-MI skills**
- **MI skills learned are lost over time unless intensive and/or ongoing supervision provided**

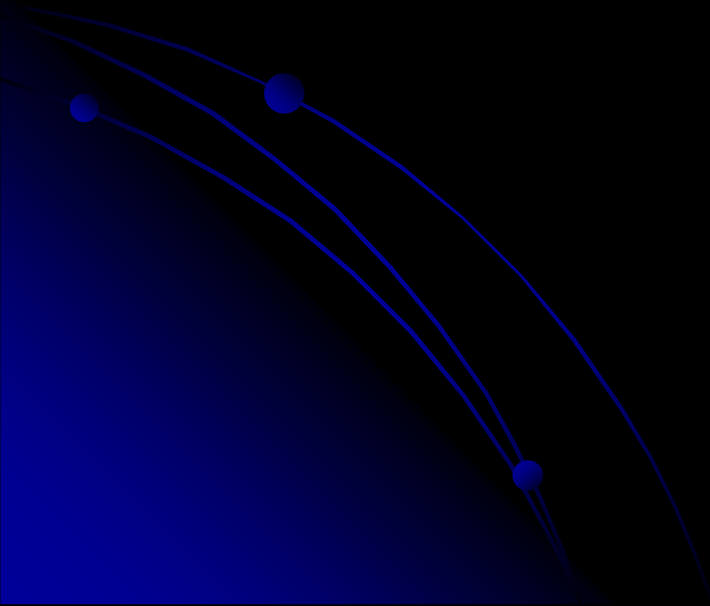
(Baer et al, 2003; Miller & Mount, 2001; Rubel et al, 2000)

Motivation Interviewing (MI) and Enhancement Therapy (MET)

Clinical Trials Network

- **MET for pregnant women**
 - **MET for Spanish Speaking Clients**
 - **MET for African American Clients (?
Proposed)**
- 

**Case of Adolescents
Help Me, But Don't Tell Me
What to Do!**



Normal Adolescent (12-17) and Young Adult (18-25) Development

- Biological changes in the body, brain, and hormonal systems that continue into mid-to-late 20s
- Shift from concrete to abstract thinking
- Improvements in the ability to link causes and consequences (particularly strings of events over time)
- Separation from a family-based identity and the development of peer and individual-based identities
- Increased focus on how one is perceived by peers
- Increasing rates of sensation seeking/experimenting
- Development of impulse control and coping skills
- Concerns about avoiding interpersonal emotional or physical violence
- Realizing that they are not invincible to environmental risks (which are often less proximate or likely)

Conceptual Challenges to Address

- Most adolescents do not recognize their substance use as a problem and are being mandated to treatment (and are angry about it)
- Co-occurring problems (mental, trauma, legal) are the norm and often predate substance use
- Treatment has to take into account the multiple systems (peers, family, school, welfare, criminal justice) involved in their lives
- Adolescents have less control of their lives and recovery environment than adults
- Need to be creative in dealing with family and peer relationships because they are still central to the adolescent's self-identity and are not easily changed

Family, Peer Groups, and Community

- Families often play a pivotal role, but vary in their ability and willingness to help
- Peer groups are very powerful – but can have both negative and positive effects
- One or two very disruptive people can destroy a group and actually lead to worse outcomes
- Need to minimize confrontational approaches unless you have the time and control necessary to do them well and safely
- Less availability of aftercare, 12-step groups and peer based recovery support

Adapting Interventions

- Examples need to be reflect the substances, situations, and triggers relevant to adolescents
- Motivational strategies and consequences have to reflect things of concern to adolescents
- Concepts need to be expressed in “concrete” (vs.abstract) terms to match developmental stage
- Curricula need to take into account individual differences in severity, co-occurring problems, and development – which often change during the course of treatment
- Need for treatment facilities that are physically durable and to have access to recreational facilities

MI

- Marlatt et al randomly assigned high school seniors (female: 188 subjects; male: 160 subjects) to an individualized, brief, MI intervention during their freshman year in college or to a no-treatment condition.
- Subjects were screened during high school, and no subjects 19 years of age were included.
- Subjects received 1 MI session during the winter term of their freshman year in college.
- Outcome measures included drinking rates, alcohol-related problems, and alcohol dependence.
- Self-reports of quantity, frequency, and peak alcohol consumption were collected and collateral reports were used to corroborate reports

Marlatt et al, 1998

Deas D, 2008: Evidence-based treatment for alcohol use disorders in adolescents

Marlatt et al, 1998

- The MI group demonstrated significant decreases in drinking and reductions in alcohol-related consequences. The significant reductions in drinking were demonstrated in both short-term and long-term drinking outcomes.
- At the 6-month follow-up assessment, subjects in the MI group drank significantly less frequently and drank smaller quantities over time, and their peak quantity was smaller.
- These positive outcomes persisted at the 2-year follow-up assessment, again with significantly lower frequency, quantity, and peak alcohol consumption for the MI group, compared with the control group.

McCambridge & Strang 2004

- Randomly assigned 200 adolescents (age range: 16–20 years; mean age not indicated) to 1 session of MI versus a non intervention, education-as-usual, control condition.
- Baseline assessments included peer interviews, self-reports of drug use, and testing of hair samples for biochemical validation of drug use.
- The outcome variables were changes in drug use (nicotine, alcohol, cannabis, and other drug use), changes in drug-specific perceptions, and changes in behavioral outcomes.
- At baseline, 11 subjects in the intervention group and 17 subjects in the control group were identified as nondrinkers. The 3-month follow-up evaluation revealed that 13 nondrinkers (1 from the MI group and 12 from the control group) had initiated drinking.
- Overall, the MI group showed significant reductions in nicotine, alcohol, and marijuana use.

Tevyaw & Monti, 2004

- Review paper
- FINDINGS: Results from recent clinical trials using motivational interventions indicate that these approaches result in decreases in substance-related negative consequences and problems, decrements in substance use and increased treatment engagement, with results particularly strong for those with heavier substance use patterns and/or less motivation to change.

Peterson et al, 2006

- The short-term results of a randomized trial testing a brief feedback and motivational intervention for substance use among homeless adolescents are presented.
- Homeless adolescents ages 14–19 (*N* 285)
- Recruited from drop-in centers at agencies and from street intercept
- Randomly assigned to either a brief motivational enhancement (ME) group or 1 of 2 control groups.
- The 1-session motivational intervention presented personal feedback about patterns of risks related to alcohol or substance use in a style consistent with motivational interviewing.
- Follow-up interviews were conducted at 1 and 3 months postintervention. Youths who received the motivational intervention reported reduced illicit drug use other than marijuana at 1-month follow-up compared with youths in the control groups.
- Treatment effects were not found with respect to alcohol or marijuana.
- Post hoc analyses within the ME group suggested that those who were rated as more engaged and more likely to benefit showed greater drug use reduction than did those rated as less engaged.

Grenard et al, 2006

- Studies of brief motivational interviewing (MI) interventions applied to adolescents (ages 13 to 18 years) and young adults (ages 19 to 25 years) using alcohol or other psychoactive substances.
- 17 clinical studies reported in the literature.
- This review revealed mixed findings for the efficacy of brief MI among these populations.
- However, in 29% of the studies (5 of 17), there was a clear advantage of the brief MI demonstrated compared to standard care
- Components common to successful brief MI interventions included one-on-one sessions and feedback on substance use compared to norms.
- Interviewer empathy has been shown to be a key component in studies with adults, but this was not measured in a standardized manner across the current studies.
- The studies reviewed here indicate that brief MI might be effective among these populations, but the key components necessary for successful MI interventions have not been fully identified.

Stein et al, 2006

- Motivational Interviewing (MI) to reduce alcohol and marijuana-related driving events among incarcerated adolescents
- Adolescents were randomly assigned to receive MI or Relaxation Training.
- As compared to RT, adolescents who received MI had lower rates of drinking and driving, and being a passenger in a car with someone who had been drinking.
- Effects were moderated by levels of depression.
- At low levels of depression, MI evidenced lower rates of these behaviors; at high levels of depression, effects for MI and RT were equivalent.
- Similar patterns were found for marijuana-related risky driving, but effects were nonsignificant.

Bill Miller

- After 30 years of research, we have a treatment method that is evidence-based (over 180 randomized clinical trials published), relatively brief (typically 1-3 sessions), specifiable, grounded in testable theory with identifiable mechanism of action, verifiable (as to whether it is being delivered competently), generalizable across a wide range of problem areas, and learnable by a broad range of providers. And we are just getting started!!!!