Motivational Interviewing (MI)

Topic Areas Scientific Rating Child Welfare Relevance Motivation and Engagement Programs

1 — Well-Supported by Research Evidence

Medium

Substance Abuse Treatment (Adult)

Well-Supported by Research Evidence

Medium

About This Program Program Overview Program Goals

The goals of *Motivational Interviewing (MI)* are:

- Enhance internal motivation to change
- · Reinforce this motivation
- Develop a plan to achieve change

Essential Components

The essential components of *Motivational Interviewing (MI)* include:

- Emphasis of two essential dimensions related to an individual's ambivalence to change:
- o the importance of the change
- $_{\circ}$ the confidence that the change can be accomplished
- Inclusion of open-ended questions encouraging the client to talk about circumstances surrounding his or her referral for evaluation, as opposed to the standard substance abuse evaluation that includes administering a number of structured interviews asking closed-ended questions. Examples of the types of open-ended questions that might be used are as follows:
- What worries you about your substance use?
- o How has your use of substances presented problems for you in the past?

- What kinds of things would need to happen to make you consider changing your substance use?
- What are the things that would prevent you from changing your substance use?
- What are your concerns about entering substance abuse treatment at this time?
- Utilization of reflecting listening statements that focus on the client's language around change. The goal is to evoke from clients their own reasons, needs, desire, and abilities to change.

Program Delivery

Adult Services

Motivational Interviewing (MI) directly provides services to adults (regardless of whether they are parents or caregivers) and addresses the following:

Substance abuse or dependence and other health/lifestyle behavior change issues

Recommended Intensity:

Usually 1-3 individual sessions, 2-3 sessions are preferred

Recommended Duration:

30-50 minutes each session; brief interventions have also been supported by

Delivery Settings

This program is typically conducted in a(n):

- Community Agency
- Hospital
- Outpatient Clinic
- Residential Care Facility

Homework

This program does not include a homework component.

Languages

Motivational Interviewing (MI) has materials available in languages <u>other than English</u>:

Bulgarian, Chinese, Czech, Danish, Dutch, Estonian, French, German, Greek, Hebrew, Italian, Japanese, Korean, Portuguese, Romanian, Spanish, Swedish, Turkish

For information on which materials are available in these languages, please check on the program's website or contact the program representative (contact information is listed at the bottom of this page).

Resources Needed to Run Program

The typical resources for implementing the program are:

A room to conduct the session

Education and Training

Prerequisite/Minimum Provider Qualifications

There are no minimal educational requirements to be trained in **MI**.

Education and Training Resources

There <u>is a manual that describes how to implement this program</u>, and there <u>is training available for this program</u>.

Training Contact:

 Melinda Hohman, PhD mhohman@mail.sdsu.edu

Training is obtained:

Training can be provided on-site. Follow-up feedback and coaching can be delivered effectively by telephone. The website http://www.motivationalinterviewing.org/ contains a list of trainers by state along with current training offerings.

Number of days/hours:

Please see http://www.motivationalinterviewing.org/motivational-interviewing-training for more information.

Implementation Information

Pre-Implementation Materials

There are no pre-implementation materials to measure organizational or provider readiness for *Motivational Interviewing (MI)*.

Formal Support for Implementation

There is formal support available for implementation of *Motivational Interviewing (MI)* as listed below:

Melinda Hohman, see contact information at end of entry, has a list of trainers who provide formal support and coaching.

Fidelity Measures

There are fidelity measures for *Motivational Interviewing (MI)* as listed below:

The Motivational Interviewing Treatment Integrity (MITI) is an instrument that yields feedback that can be used to increase clinical skill in the practice of motivational interviewing. The MITI measures how well or how poorly a practitioner is using MI and can be found on casaa.unm.edu/download/miti.pdf. Coding resources to measure fidelity can be found at http://casaa.unm.edu/codinginst.html.

Implementation Guides or Manuals

There are implementation guides or manuals for *Motivational Interviewing (MI)* as listed below:

The Motivational Interviewing Assessment: Supervisory Tools for Enhancing Proficiency (MIA-STEP) package is a collection of tools for mentoring counselors and other clinicians in the use of MI skills during clinical assessments. MIA-STEP was produced by The Addiction Technology Transfer Center (ATTC) Network under a cooperative agreement from the Substance Abuse and Mental Health Services Administration's (SAMHSA) Center for Substance Abuse Treatment (CSAT) and the National Institute on Drug Abuse (NIDA). This document can be found at http://www.motivationalinterviewing.org/sites/default/files/mia-step.pdf.

Research on How to Implement the Program

Research has not been conducted on how to implement *Motivational Interviewing (MI)*.

Relevant Published, Peer-Reviewed Research

This program is rated a "1 - Well-Supported by Research Evidence" on the Scientific Rating Scale based on the published, peer-reviewed research available. The program must have at least two rigorous randomized controlled trials with one showing a sustained effect of at least 1 year. The article(s) below that reports outcomes from an RCT showing a sustained effect of at least 1 year has an asterisk (*) at the beginning of its entry. Please see the Scientific Rating Scale for more information.

Child Welfare Outcome: Safety

Several meta-analyses have been conducted on the effects of MI:

- Burke, B. L., Arkowitz, H., & Menchola, M. (2003). The efficacy of motivational interviewing: A meta-analysis of controlled clinical trials. *Journal of Consulting and Clinical Psychology*, 71, 843-861. doi:10.1037/0022-006X.71.5.843
- Hettema, J., Steele, J., & Miller, W. (2005). Motivational interviewing. Annual Review of Clinical Psychology, 1, 91-111. doi:10.1146/annurev.clinpsy.1.102803.143833
- Vasilaki, E., Hosier, S., & Cox, W. (2006). The efficacy of motivational interviewing as a brief intervention for excessive drinking: A meta-analytic review. *Alcohol and Alcoholism*, 41, 328-335. doi:10.1093/alcalc/agl016
- Lundahl, B. W., Kunz, C., Brownell, C., Tollefson, D. & Burke, B. L. (2010). A meta-analysis of Motivational Interviewing: Twenty-five years of empirical studies. Research on Social Work Practice, 20, 137-160. doi:10.1177/1049731509347850
 - *Baer, J. S., Marlett, G. A., Kivlahan, D. R., Fromme, K., Larimer, M. E., & Williams, E. (1992). An experimental test of three methods of alcohol risk reduction with young adults. *Journal of Consulting and Clinical Psychology*, 60(6), 974-979. doi:10.1037/0022-006X.60.6.974

Type of Study: Randomized controlled trial

Number of Participants: 134

Population:

- Age Mean=21.2 years
- Race/Ethnicity 91% White, 4.5% Asian, less than 1% Black, Latin American, or Native American
- Gender 52% Female
- Status Participants were student volunteers recruited through the media.

Location/Institution: Not specified

Summary: (To include comparison groups, outcomes, measures, notable limitations)

This study examined the efficacy of *Motivational Interviewing (MI)* on alcohol risk reduction programming for young adults. Volunteers were required to report at least one alcohol-related problem on the *Michigan Alcoholism Screening Test (MAST)*. Participants were randomly assigned to receive meetings in a classroom format (six 90-minute sessions), six self-help reading units, or *MI*. After the interventions, drinking was monitored with the *Daily Drinking Questionnaire* at 3, 6, 12, and 24 months. Compliance varied across treatment conditions, with the fewest participants completing the self-help condition, and the most completing the *MI* condition. Due to lack of compliance, the self-help condition was not included in the final analysis. Participants in both the classroom and *MI* conditions showed reductions in drinking rates, which were maintained at two years, with the exception of a temporary increase when 20-year-old participants reached the legal drinking age. Limitations include lack of an assessment-only control group and generalizability due to ethnicity.

Length of postintervention follow-up: 2 years.

*Baer, J. S., Kivlahan, D. R., Blume, A. W., McKnight, P., & Marlatt, G. A. (2001). Brief intervention for heavy drinking college students: 4-year follow-up and natural history. *American Journal of Public Health*, *91*(8), 1310-1316. doi:10.2105/AJPH.91.8.1310

Type of Study: Randomized controlled trial

Number of Participants: 461

Population:

- Age Younger than 19 years
- Race/Ethnicity 84% White and 16% Other
- Gender 55% Female

• Status — Participants were students recruited through a mailed questionnaire.

Location/Institution: University of Washington

Summary: (To include comparison groups, outcomes, measures, notable limitations)

This study examined the efficacy of *Motivational Interviewing (MI)* on alcohol risk reduction programming for young adults. Students completing the questionnaire were included if they reported having 5 to 6 drinks on at least one occasion in the preceding month and reported at least 3 negative consequences from drinking on the *Rutgers Alcohol Problems Inventory*. An additional randomly selected set of respondents served as a comparison group. Participants in the *MI* condition received individualized feedback sessions and written information comparing their drinking patterns and consequences with their peers. Groups did not differ in drinking frequency, but the *MI* group showed significant reductions in drinking quantity and negative consequences from drinking over the follow-up period. Limitations include reliability on self-report measures and study included participants from only one large university.

Length of postintervention follow-up: 4 years.

Carroll, K. M., Libby, B., Sheehan, J., & Hyland, N. (2001). Motivational interviewing to enhance treatment initiation in substance abusers: An effectiveness study. *The American Journal on Addictions, 10*, 335-339. doi:10.1111/j.1521-0391.2001.tb00523.x

Type of Study: Randomized controlled trial

Number of Participants: 60

Population:

- Age Mean=34 years
- Race/Ethnicity Standard: 86.2% Caucasian, 10.3% Hispanic, and 3.4% African American. Intervention: 80.6% Caucasian, 9.7% Hispanic, 6.5% African American, and 3.2% Other.
- **Gender** Standard: 62.1% Female, Intervention: 80.6% Female
- Status Participants were individuals referred by child welfare caseworkers for a substance abuse evaluation.

Location/Institution: Connecticut

Summary: (To include comparison groups, outcomes, measures, notable limitations)

This study examined the efficacy of *Motivational Interviewing (MI)* as an enhanced treatment initiation with substance abusers. Participants were randomly assigned to receive either standard treatment or standard treatment with *MI*. Measures utilized include the rates of participants who attended one or three subsequent drug abuse treatment sessions after the evaluation as well as basic demographic data and substance abuse history was also collected. Results showed that significantly more participants in the *MI* group went on to attend treatment sessions than in the standard group (59.3% versus 29.2%). However, this advantage did not persist beyond treatment initiation. Limitations include small sample size, lack of follow up, and generalizability of findings due to ethnicity.

Length of postintervention follow-up: None.

Mullins, S. M., Suarez, M., Ondersma, S. J., & Page, M. C. (2004). The impact of Motivational Interviewing on substance abuse treatment retention: A randomized control trial of women involved with child welfare. *Journal of Substance Abuse Treatment*, 27, 51-58. doi:10.1016/j.jsat.2004.03.010

Type of Study: Randomized controlled trial

Number of Participants: 71

Population:

- Age Mean=27.1 years
- Race/Ethnicity 47.9% Caucasian, 32.4% African American, 12.7% Native American, and 7.0% Hispanic
- Gender 200% Female
- Status Participants were women enrolled in a 12-month treatment program for pregnant women using drugs following Child Protective Services referral.

Location/Institution: Not Specified

Summary: (To include comparison groups, outcomes, measures, notable limitations)

This study examined the efficacy of *Motivational Interviewing (MI)* on substance abuse treatment retention for women. Participants were randomly assigned to *MI* or to an education control condition. All participants also attended

weekly psychoeducational and substance abuse groups and received random weekly urine testing. No differences were found between the *MI* and control conditions. The authors suggest that *MI* may have limited effectiveness with a coerced population. Limitations include lack of use of standardize measurements, small participant size, and lack of follow-up.

Length of postintervention follow-up: None.

Freyer-Adam, J., Coder, B., Baumeister, S. E., Bischof, G., Riedel, J, Paatsch, K. ... Hapke, U. (2008). Brief alcohol intervention for general hospital inpatients: A randomized controlled trial. *Drug and Alcohol Dependence*, *93*(3), 233-243. doi:10.1016/j.drugalcdep.2007.09.016

Type of Study: Randomized controlled trial

Number of Participants: 595

Population:

Age — 18-64 years

- Race/Ethnicity Not specified
- Gender 94% Male and 6% Female
- Status Participants were hospital patients with alcohol problems based on a
 positive screening result.

Location/Institution: Germany

Summary: (To include comparison groups, outcomes, measures, notable limitations)

This study examined the efficacy of *Motivational Interviewing (MI)* on alcohol intervention for general hospital inpatients. Participants were randomly assigned to a control group, or to one of two *MI* groups: liaison service group or a physician-based group. Measures utilized include the *Readiness to Change Questionnaire (RCQ), Treatment Readiness Tool (TReaT), Health Behaviour Questionnaire*, and the *Mental Health Inventory (MHI-5)*. Results indicated that all groups reduced drinking and that there were no significant group differences. The *MI* treatment groups reported an increase in motivation to change drinking behavior. Limitations include generalizability due to gender and missing data.

Length of postintervention follow-up: Approximately 11 months.

Osterman, R. L., & Dyehouse, J. (2012). Effects of a Motivational Interviewing intervention to decrease prenatal alcohol use. *Western Journal of Nursing Research*, 34(4), 434-454. doi:10.1177/0193945911402523

Type of Study: Randomized controlled trial

Number of Participants: 67

Population:

- Age 18-44 years
- Race/Ethnicity 67% African American, remainder not specified
- Gender Females
- Status Participants were pregnant women with previous year alcohol use who
 were referred from three prenatal clinics.

Location/Institution: Three Midwestern U.S. prenatal clinics

Summary: (To include comparison groups, outcomes, measures, notable limitations)

The study evaluated the effectiveness of *Motivational Interviewing (MI)* in decreasing prenatal alcohol use in a sample of pregnant women. Participants were randomly assigned to an intervention or comparison group and were assessed at baseline and 4 to 6-week follow-up using the *Alcohol Use Disorders Identification Test (AUDIT)*, *Basic Psychological Needs Scale (BPNS)*, and the *Treatment Self-Regulation Questionnaire (TSRQ)*. Results indicated that *MI* was not effective in decreasing prenatal drinking behaviors in this study; however, nonspecific factors were identified, such as treatment structures, participant motivation for improvement, and provider qualities, which may have influenced these results. Limitations included the relatively small sample size and a higher attrition in the intervention group than the comparison group.

Length of postintervention follow-up: 4-6 weeks.

Magill, M., Colby, S. M., Orchowski, L., Murphy, J. G., Hoadley, A., Brazil, L. A., & Barnett, N. P. (2017). How does brief motivational intervention change heavy drinking and harm among underage young adult drinkers?, *Journal of Consulting and Clinical Psychology*, 85(5), 447-458. doi:10.1037/ccp0000200

Type of Study: Randomized controlled trial

Number of Participants: 167

Population:

- Age 17-20 years (Mean=18.2 years)
- Race/Ethnicity 59% non-Hispanic White, 10% non-Hispanic Black/African American, 11% Hispanic, and 14% Multiethnic
- Gender 58% Female
- Status Participants were underage, past-month heavy drinkers recruited from community (i.e., non-4-year college or university) settings.

Location/Institution: Not specified

Summary: (To include comparison groups, outcomes, measures, notable limitations)

This study compared the efficacy of a brief *Motivational Interviewing (MI)* to a time- and attention-matched control of meditation and relaxation training for alcohol use. Participants were randomly assigned to an intervention. Measures utilized include the Contemplation Ladder, the Strategies to Limit Drinking Scale, the Timeline Follow Back (TLFB), and the Brief Young Adult Alcohol Consequences Questionnaire (BYAACQ). Results indicate that MI efficacy for reducing 6-week heavy drinking days (HDD) was mediated by baseline to postsession changes in the following 3 processes: increasing motivation, increasing self-efficacy, and decreasing the amount these young adults intended to drink in the future. For 6-week alcohol consumption (AC), MI efficacy was mediated through 1 process: decreased perceived drinking norms. At 3-month follow up, increased cognitive dissonance mediated HDD, but not AC. Further, increased use of certain protective behavioral strategies (i.e., avoidance of and seeking alternatives to drinking contexts) from baseline to 6-weeks mediated both 3-month HDD and AC. Limitations include generalizability of results due to ethnicity of participants, small sample size, and length of follow-up.

Length of postintervention follow-up: 6 weeks and 3 months.

Colby, S. M., Orchowski, L., Magill, M., Murphy, J. G., Brazil, L. A., Apodaca, T. R., ... Barnett, N. P. (2018). Brief motivational intervention for underage young adult drinkers: Results from a randomized clinical trial. *Alcoholism: Clinical and Experimental Research*, 42(7), 1342-1351. doi:10.1111/acer.13770

Type of Study: Randomized controlled trial

Number of Participants: 167

Population:

- Age 17-20 years (Mean=18.2 years)
- Race/Ethnicity 59% non-Hispanic White, 10% non-Hispanic Black/African American, 11% Hispanic, and 14% Multiethnic
- Gender 58% Male and 42% Female
- **Status** Participants were underage, past-month heavy drinkers recruited from community (i.e., non-4-year college or university) settings.

Location/Institution: Not specified

Summary: (To include comparison groups, outcomes, measures, notable limitations)

This study compared the efficacy of a brief *Motivational Interviewing (MI)* intervention to a time-matched attention control intervention (relaxation training [REL]) for reducing alcohol consumption and related negative consequences in an underage young adult sample. Nontreatment-seeking underage drinkers who reported past-month heavy drinking were randomly assigned to receive a single session of **MI** or REL. Measures utilized include the Timeline Follow Back (TLFB) and the Brief Young Adult Alcohol Consequences Questionnaire (BYAACQ). Results provided strong support for the efficacy of **MI** for reducing harmful drinking in these young adults. Compared to REL, and after controlling for baseline covariates including gender, those who received **MI** subsequently reported significantly fewer average drinks per week, percent drinking days, percent heavy drinking days, lower peak and typical estimated blood alcohol concentration on drinking days, and fewer adverse consequences of drinking. These between-group effects did not weaken over the course of the 3-month follow-up period. Limitations include generalizability of results due to ethnicity of participants, reliance on self-reported measures, small sample size, and length of follow-up.

Length of postintervention follow-up: 3 months.

Additional References

Hohman, M. (2012). *Motivational Interviewing in social work practice.* New York: Guilford Press.

Miller, W. R., & Rollnick, S. (2013). *Motivational Interviewing: Helping people change* (3rd ed.). New York: Guilford Press.

N'zi, A. M., Lucash, R. E., Clionsky, L. N., & Eyber, S. M. (2017). Enhancing Parent-Child Interaction Therapy with Motivational Interviewing techniques. *Cognitive and Behavioral Practice*, 24(2), 131-141. doi:10.1016/j.cbpra.2016.03.002

Contact Information

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