

## Motivational Interviewing

### Review 6

Dunn, C., Deroo, L., & Rivara, F. P. (2001). The use of brief interventions adapted from motivational interviewing across behavioral domains: A systematic review. *Addiction, 96*(12), 1725–1742. PubMed abstract available at <http://www.ncbi.nlm.nih.gov/pubmed/11784466>.

<b>Objectives</b>	Assess the effectiveness of brief behavioral interventions adapting the principles and techniques of MI in the substance abuse, smoking, HIV risk, and diet and exercise domains.
<b>Studies Included</b>	Twenty-nine U.S. and international studies published from 1988 to 2000
<b>Participants in the Studies</b>	Male and female youth and adult smokers, or with substance abuse or eating disorders, or at risk for HIV
<b>Settings</b>	Substance abuse treatment agencies, universities, hospitals, outpatient medical clinics, emergency rooms
<b>Outcomes</b>	Substance abuse, smoking rates, HIV-risk behaviors, physical activity levels, physiological measures, eating disorder behaviors
<b>Limitations of the Studies</b>	Studies often used research staff as MI interventionists rather than clinicians working in treatment settings, thus reducing the generalizability of findings to real-world settings. Studies often lacked standardized coding for monitoring MI style and technique. The major theoretical components of MI are understudied, so no psychosocial interaction variables that might influence responsiveness to MI can be inferred.

### Results

Evidence of MI effectiveness was presented by reviewing effect sizes across included studies, clinician training time, treatment delivery time, and interaction variables that may help explain the mechanisms by which MI works. Twenty-five studies had at least one outcome with a significant effect size in favor of MI, with substance abuse outcomes showing the most evidence supporting MI effectiveness. One of two smoking studies had a significant effect size; two of four HIV risk-reduction studies had significant effect sizes; and three of five diet/exercise studies yielded significant effect sizes. The largest effect sizes were found in a weight reduction study, while the smallest effect size was found in a smoking cessation study. MI was most effective when used as an enhancement to more intensive substance abuse therapy.

Of the 29 studies included in this review, 10 provided data on number of training hours with an average of 15 hours. The average duration of MI was 104 minutes in studies comparing MI to a no-treatment control group, 98 minutes in studies comparing MI to another treatment, and 70 minutes when MI was used as enhancement to usual treatment. Few studies reported data on the major theoretical mechanisms of MI, with the exception of readiness to change, which appeared to yield mixed results. There was some evidence suggesting potential

cost-effectiveness in cases where MI appeared to be more time-effective when compared to other treatment models.