Combining Motivational Interviewing With Cognitive-Behavioral Treatments for Substance Abuse: Lessons From the COMBINE Research Project

Theresa B. Moyers and Jon Houck, University of New Mexico

Motivational Interviewing began as a treatment for substance misuse and has strong empirical support as an intervention for these disorders. It is very common for MI to be combined with other types of treatment when it is used for substance abuse, and this article focuses on one example of this: the COMBINE Research Project. We examine the Combined Behavioral Intervention (CBI), which integrated MI and cognitive-behavioral strategies as well as several other approaches. The intervention is described and conceptual issues regarding the integration of MI with other treatments is explored.

In contrast to the widespread application it enjoys today, Motivational Interviewing (MI) began as a treatment for a specific disorder: problem drinking (Miller, 1983). At the time it was developed, MI's focus on collaboration to nurture inherent motivation to change was a contrast to the confrontational treatments common for drinkers. This empathic and evoking style of MI has been married to a variety of companion interventions for problem drinking, including behavioral self-control (Graber & Miller, 1988; Harris & Miller, 1990; Miller, 1978) and personalized feedback (Walters, 2000; Walters, Vader, Harris, Field, & Jouriles, 2009). Eventually, the specific elements of MI were separated from the companion treatments with which it had commonly been paired, such as assessment feedback, as in Project MATCH (Project MATCH Research Group, 1997). This allowed MI to be offered as a stand-alone treatment, with results in clinical trials indicating that it was often effective even without adjunct treatments. The question of whether to use MI alone or with other treatments has not yet been resolved, however, with many studies showing an even greater effect for MI when it is paired with more intensive interventions such as inpatient treatment (Bien, Miller, & Boroughs, 1993; Brown & Miller, 1993) and with personalized feedback (Juarez, Walters, Daugherty, & Radi, 2006; Walters, 2000; Walters et al., 2009). In this article, we will focus on the strategy of combining MI with cognitive-behavioral treatment, using the example of the combined behavioral intervention (CBI), employed in the COMBINE Research Project. We will describe the rationale for combining MI with cognitive behavioral treatment, the exact nature of the treatment as it was offered in COMBINE, and some of the unexpected turns in the road that accompanied this marriage of MI with a structured cognitive-behavioral intervention for substance abuse.

Rationale for Adding MI to CBT

The tradition of pairing MI with other interventions was strengthened with the advent of Project MATCH (Project MATCH Research Group, 1997). Behavioral scientists designing psychosocial interventions for Project MATCH faced the task of blending three empirically supported treatments: MI, 12-step treatment, and cognitive-behavioral therapy (CBT). While a 12-session adaptation of CBT was relatively straightforward, the other two interventions required some thought. How to design a treatment that took advantage of the effective ingredients within a 12-step program but was not itself a 12-step group? This dilemma was resolved by the creation of Twelve-Step Facilitated Therapy (TSF), which focused on therapists facilitating the client's entry to and compliance with a 12-step program. With both CBT and TSF having 12 sessions, the disparity with the MI treatment, which was conceptualized as a 2-session intervention, was glaring. In an effort to balance the amount of treatment received in the MI group, MATCH scientists added personalized feedback (which had been previously used in several MI clinical trials), doubling the number of sessions to 4. This treatment, called Motivational Enhancement Therapy (MET), became an iconic representation of MI, and was widely distributed in articles and manuals from Project MATCH. According to Miller (Miller & Rollnick, 2008), the confusion between MI and MET has been widespread, with many MI practitioners believing that personalized feedback is an essential component of MI. In some ways this is a benign problem since personalized feedback is
likely to provide active ingredients for change that may complement MI (Walters, 2000; Walters et al., 2009). To the extent, though, that this focus on feedback diverts clinicians from the hypothesized active ingredients of MI, such as empathy and shaping client language, it can be considered a potential hazard to implementing MI appropriately.

The successful blending of MI and other, usually behavioral, interventions for substance abuse is now widespread and much more common than the use of “pure” MI (Burke, Dunn, Atkins, & Phelps, 2004; Hettema, Steele, & Miller, 2005). MI is often included in substance abuse interventions with the rationale that it will help engage clients into more substantive and effective treatments such as CBT, although more recent studies have often incorporated a stand-alone MI condition as well. MI has been combined with psychophysiological feedback (Stotts, Potts, Ingersoll, George, & Martin, 2007) and CBT (McKee et al., 2007) to reduce cocaine use, with results indicating that treatments incorporating MI show superior results to control conditions that do not include it. Using MI both alone (Stephens, Roffman, & Curtin, 2000) and in combination with CBT (Babor & Marijuana Treatment Project Research Group, 2004) has been shown to reduce marijuana use, though the longer and more complex treatment incorporating CBT seems to produce better outcomes. MI has also been incorporated into the treatment of problem drinking in men who have sex with men (Morgenstern et al., 2007) in a direct comparison of a “pure” MI condition and one blending MI with CBT. In this study, the stand-alone MI condition produced superior results to the lengthier combined treatment, although differences between groups were minimal at follow-up. These studies indicate that the strategy of combining MI with complex cognitive-behavioral treatments produces substance abuse outcomes that are often, but not always, superior to MI as a stand-alone treatment. In the remainder of this paper we will focus on The COMBINE Research Project as a case study in order to examine the problems and pitfalls in combining MI with other treatments.

**Clinical Application**

The COMBINE Research Project was a clinical trial funded by the National Institute of Alcoholism and Alcohol Abuse (NIAAA) to investigate the effectiveness of two medications (naltrexone and acomprosate) for heavy drinking, both alone and in combination with each other (The COMBINE Study Research Group, 2003). The behavioral scientists tasked with creating a companion psychosocial intervention for the drug trial were mindful of the fact that many alcohol treatments, despite the fact that they call upon theoretically distinct active ingredi-
addressing a broader spectrum of skills (job finding, assertion skill training). CBI treatment ended with a concluding session focused on building efficacy for maintaining changes that had been accomplished. Overall, CBI was intended to be a treatment that began with efforts to engage and motivate drinkers, transitioning into specific skills-building modules to facilitate abstinence, with simultaneous encouragement to attend mutual support groups and involve concerned others in treatment.

CBI was innovative in two ways. First, it was unique in the “kitchen sink” approach of merging elements from so many theoretically diverse, evidence-based alcohol treatments within a flexible format that also emphasized a client’s ability to choose from among those components the ones that were most salient to them. Second, it was unique in using MI (a) both as an explicit component of a multifaceted intervention for the purpose of increasing client motivation, and (b) as the underlying client-centered style informing the other disparate elements of the intervention. Later, we will discuss some of the complexities raised in combining the MI spirit with specific components of non-MI treatments.

**Therapists Delivering the CBI**

Because of the rigorous nature of a large, randomized controlled trial, therapists selected to deliver CBI were a highly educated and well-trained group. In order to be eligible to work in the COMBINE Research Study, therapists were required to have a master’s degree in counseling, psychology, social work or a related field, as well as 2 years of post-degree counseling experience. Once hired, therapists attended a 3-day workshop and watched a series of nine videotapes about MI and CBT. All therapists treated three practice cases with the CBI protocol, which were audiotaped. These audiotapes were reviewed for competence and either resulted in certification (the therapist could begin study cases) or a request for additional practice cases until competence was demonstrated. Therapists for this study were 60% female, 88% White, and were evenly divided between master’s and Ph.D./Psy.D. degrees. They had an average of 71 months of experience working with substance abuse patients and most described themselves as cognitive-behavioral (44%), psychodynamic (21%), or humanistic (13.28%) in their theoretical orientation.

Because MI was a critical component of the CBI intervention, therapists recruited for the COMBINE study were screened in a novel way to test their aptitude for acquiring MI. Specifically, the client-centered skill of accurate empathy was assessed and used as an entry criterion for therapists (Miller, Movers, Arciniega, Ernst, & Forcehimes, 2005). An empathy prescreening procedure was devised in which potential CBI therapists submitted a taped sample of themselves listening to another person (a peer, family member or friend) discussing a personally compelling topic. The therapists were told to listen with empathy and rely as much as possible on reflections and open questions for their responses. The number and quality of the potential therapists’ reflections were rated using a behavioral coding system, and those with at least 50% of their responses constituting reflections (and with 50% of reflections being complex) were deemed as a “pass.” Of those applying, 30% did not pass the initial empathy prescreen (Miller et al., 2005), indicating that listening skills are not universal among even highly qualified substance abuse professionals. It was also the case that a few highly qualified therapists were not ever able to achieve competence in using MI through the CBI training procedures and failed to achieve initial certification despite sincere and repeated attempts. Of those initially certified, 14% required retraining in some aspect of MI during the course of the study.

**Dilemmas in Applying MI in the CBI**

**Moving Forward With a Treatment Plan**

Most therapists were able to learn to deliver an essentially behavioral treatment in a manner that evoked the client’s own motivations to change, conveyed support for client autonomy, and was collaborative. The tension came in marrying the directive and client-centered elements of CBI, in much the same way it does in MI more generally. Quality assurance (QA) monitoring through review of session tapes indicated that most therapists seemed to favor one “side” of the dilemma or another, being especially good at either direction or client-centeredness. Therapists who favored an empathic, client-centered approach, for example, often lingered in the MI stage of the therapy, even when the client had met protocol criteria for moving on (lowered resistance, verbal indication of willingness to consider changing drinking). These therapists, strong in empathic skills, often raised QA concerns by failing to have even a single item in a treatment plan by the fifth session, requiring a remediation plan. Conversely, therapists with strong skills in CBT were often hasty in the initial stages of engagement and motivation, with predictable results in increased client resistance. Regardless, the CBI protocol mandated a treatment plan to be in place by the end of the fourth session, whatever the therapist’s inclinations. Similarly, therapists were not allowed to “back up” and do pure MI once the treatment modules had begun, though they were able to pause and briefly use empathic listening and examination of autonomy as a means of facilitating the treatment module on the table. Interest-
ingly, although therapists often struggled with the theoretical tension between MI and cognitive-behavioral approaches, clients did not. Generally, the transition was smooth with clients accepting the rationale and need to move on to the active elements of change once they had been engaged.

This was not always the case, though. Occasionally, clients failed to resolve their ambivalence about drinking as a result of the initial MI sessions. It was sometimes the case that therapist and client arrived at the end of Session 5 (when the treatment plan should have been complete) without any commitment to make a change, never mind to endorse abstinence. Here, the rigidity of the CBI protocol was telling. In a traditional MI approach, clients might be offered a summary, affirmed and given an invitation to return in the future without the need to push forward into change strategies in the face of continuing ambivalence. Instead, CBI therapists were encouraged to define the ambivalence itself as the focus of the treatment plan (something clients were generally quite willing to do) and ask the client’s permission to put other modules on the treatment plan that seemed sensible. Predictably, this method was associated with increased resistance and noncompliance as the modules were initiated. Of course, such resistance is more likely in any case with clients who are ambivalent, but in a traditional MI approach the clinician would be careful to avoid the potential backlash in attempting to elicit change while ambivalence is still high. Taking away this “natural” MI option was necessary in order to maintain a standardized treatment protocol, much as was the mandatory treatment plan in Project MIDAS (Miller, Yahne, & Tonigan, 2003). Though necessary, it created a tension that CBI clinicians felt and responded to. Supervision sessions were replete with questions about how to persuade clients to complete treatment modules while at the same time supporting their autonomy when they repeatedly said they did not see the need to change. This dilemma was a constant companion in the COMBINE study.

THERAPIST: Well, it looks like you are still feeling the same about your drinking as when we started three weeks ago. Some things about it are troubling you, but other things about it are very rewarding. So, that's the dilemma right now.

CLIENT: That’s it, yeah. I mean, I know I’m supposed to want to change my drinking but you asked me to be honest, so I am being honest with you. I just don’t know. I could sign on the dotted line for treatment, but the truth is I don’t think I need it. I’d like to just try to keep going the way I am. I've made a lot of progress just talking to you about it so far, you see what I mean? I don’t think I need more treatment.

THERAPIST: Yep, I can see that. You've been honest with me, and with yourself, during these last three sessions while we looked at the pros and cons of your drinking. And you’re being honest right now when you say you’re not quite ready to jump in to changing it, even though sometimes it seems like a good idea.

CLIENT: But I do appreciate the help you’ve given me so far. I think that might be all I need.

THERAPIST: Even though I know you are still thinking it over, I wonder if you would be willing to explore some ideas for building skills that could come in handy in the future, if you do decide to change your drinking.

CLIENT: Like what?

THERAPIST: Well, you’ve talked about how you often drink more than you plan to when you get angry at your boss. One of the modules for our treatment here is called Mood Management, and it focuses on gaining skills to cope with anger and other negative emotions that push some people into over-drinking. I think that would be a good one for you.

CLIENT: Yeah, but I think I just need another job. That guy is a jerk.

THERAPIST: Sure, but that module could also help you with the fights you get into with your wife and your brothers. It’s all kind of the same thing. It couldn’t hurt to look at that a little bit. Can I write that on the treatment plan, at least to start?

CLIENT: Sure. Why not?

THERAPIST: Another thing that I think might help is the module about cravings. That's something that anyone needs, even if they only want to change their drinking a little bit.

CLIENT: Ok, but I don’t have cravings, really. When I want to drink, I drink. I don't have to fight it. It's not like I drink every day.

THERAPIST: But you might have some cravings if you decide to stop drinking.

CLIENT: Maybe, but I'm not an alcoholic.

THERAPIST: Anyone can have cravings, you don't have to be an alcoholic. It's up to you, but I think it might be useful to know about it for the long run.

CLIENT: Well, I'm here in the study for the next three months, so I guess we have to talk about something, right? Ok, go ahead and put the craving one on there. What else do you think would be good?
In this exchange, the therapist has done a good job of collaborating, affirming, and trying to avoid arguing with the client. Employing directiveness, this therapist has managed to nudge the client into a treatment plan and thereby avoid a protocol violation for CBI. Nevertheless, this is accomplished only by compromising core elements of MI: that of supporting the client’s autonomy and not pushing forward to change before the client is ready.

Interestingly, without the need for a standardized treatment protocol, this issue disappears. In actual clinical settings, therapists generally have the freedom to acknowledge that the best intervention might be one that gently introduces the idea of change, without moving forward to it. Let’s imagine how this interaction might be different if the therapist were free to proceed without making a treatment plan.

CLIENT: But I do appreciate the help you’ve given me so far. I think that might be all I need.

THERAPIST: You might be right. Let’s of people change their drinking for the better without a lot of help from counselors like me. You seem to have a clear direction in mind.

CLIENT: My grandfather did it like that. He just made up his mind and he did it. He didn’t even have the benefit of the medication that I’m getting. One day he just quit drinking.

THERAPIST: You are thinking it could be like that for you.

CLIENT: If I put my mind to it.

THERAPIST: You are ready to make a change and you really want to try it on your own.

CLIENT: That’s what’s always worked best for me. Better than having a lot of other people in my business.

THERAPIST: I can see your point there. I wonder if I can bring up something that is worrying me about this, though?

CLIENT: Oh sure.

THERAPIST: Sometimes when people try something like this, it might not work out as well as they hoped. If that did happen to you, I’d like to think that you would be comfortable coming back to see me so we could explore some options that would be a little more structured. Maybe treatment sessions. Maybe some different medications. Maybe come in with your wife. It’s up to you, but there are other things we could try. I’m all for you getting the job done yourself, but I also want you to know where to turn if you decide you want more help.

Here the therapist is able to use “pure” MI strategies without regard for the need to obtain a treatment plan at any cost. Therefore, the therapist elects to support autonomy, lend some change talk, and instill optimism while providing the client the option to return in the future. Far from being a less effective intervention than the option of recruiting the client into more intensive treatment as in the first example, there are many studies showing that a few brief sessions of MI, without skills-building or other intensive interventions, can be just as effective as longer and more expensive alternatives (Project MATCH Research Group, 1997; Sellman, Sullivan, Dore, Adamson, & MacEwan, 2001).

Since the empirical evidence supports both approaches as efficacious, these examples are not intended to demonstrate the value of one approach over the other. Instead, they show that there is a genuine difference between using a pure MI approach and one that incorporates elements of other treatments, particularly within a structured research protocol. It is worth noting that there is some evidence to indicate that implementing a mandatory treatment plan will reduce client commitment language in MI sessions for drug users who remain ambivalent about changing (Miller et al., 2003; Amrhein et al., 2003). Clinicians would be wise, then, to weigh the potential benefit of having a treatment plan to “work on” with clients against the cost of lowered change talk and increased resistance that may accrue.

**Abstinence as a Mandatory Treatment Goal**

Another dilemma in weaving MI into CBI was the mandatory focus on abstinence from alcohol as the only acceptable treatment outcome. Of course, abstinence as a treatment goal is not incompatible with MI, but when clients will not endorse it the clinician faces a dilemma. This was often the case in CBI, where many clients stated overtly that they would not endorse an abstinence goal, but were very interested in cutting down their drinking. In keeping with the spirit of MI, CBI therapists found themselves avoiding arguments and supporting the autonomy of clients who spoke about the need to cut down their drinking, but remaining silent about available empirically based methods to do so (such as Behavioral Self Control Training) in order to maintain protocol integrity.

This dilemma was a poignant one for therapists, and one that is common to many treatment settings where abstinence is the only acceptable treatment goal. In such cases therapists often encourage clients to try moderation strategies for themselves or refer them to other clinicians who are more comfortable with moderate drinking strategies. They are still on solid ground for using MI, since there is nothing in the theory or practice of MI that compels therapists to collaborate with treatment goals.
they sincerely deem foolhardy or dangerous. Yet the way clients are counseled about this is critical. An MI-consistent approach argues for supporting the client’s right to choose their own treatment goals, even as the clinician expresses concern (and perhaps declines to participate). This option, not available in CBI, was another point of poor fit in using MI in a standardized substance abuse treatment protocol, as we can see by the following example:

CLIENT: My drinking is just not as bad as you all keep saying. I like the medication I’m getting but I didn’t ask for antabuse, you know? I just can’t see what’s wrong with cutting down on it. Just happy hour every week and maybe one or two at a ballgame.

THERAPIST: You know, that is an option for you. What we like to recommend in this project is what we call Sobriety Sampling. That’s where a person takes a break from drinking for a limited time, in this case during the 4 months you are in the program. After that you can always make a decision to return to drinking if you want.

CLIENT: I don’t need to give alcohol up completely. I see your point, but I just need to cut down. Like baseball games. My intentions are good but I get caught in a net when I go to my boy’s Little League games. Seems like there is always someone putting a beer in my hand. For one thing, I have a reputation as someone who will always take a beer. Once I have it in my hand, it seems like I’m stuck.

THERAPIST: In this program we could teach you some skills to turn down that beer and let people know that you don’t drink any more so they will not offer you a beer in the first place.

CLIENT: Not even one?

THERAPIST: Well, ideally, yes, but that choice is always up to you.

CLIENT: Well I’m not gonna tell everyone that I’ve given up drinking, because I haven’t. I just want to stick to one or two. I know I need to do that. I notice some of my friends just drink one beer, or maybe two, and I’ve been watching them to see how they do it.

THERAPIST: Well, in this project we really like to encourage at least a period of abstinence. Taking a break from drinking can give you a chance to find out what life is like without alcohol. Sometimes that is the only way a person ever gets to know. Sort of like a vacation from drinking. I wonder if you would consider that.

CLIENT: My drinking is not that bad right now. Maybe before, but now I am already way ahead of where I was before I came here.

Here the therapist is maintaining the collaborative spirit of MI, but is pushing for change when the client has repeatedly stated that abstinence is not in the cards. By pushing for abstinence, the therapists risks evoking resistance and rupturing the alliance. A clinician working outside a research protocol like CBI could take an approach more consistent with MI, even if abstinence were still the goal:

THERAPIST: You’ve said that you are not interested in abstinence right now and I respect that. Even though my own advice would be to give it a try, just for a limited vacation from drinking, it sounds like you are thinking that isn’t for you right now.

CLIENT: Right.

THERAPIST: Here’s the deal, though. For me, it doesn’t make sense to work on that with you. I would be lying to you and to myself if I agreed to work on cutting down your drinking. What I’m seeing convinces me that abstinence is the only thing that will genuinely improve your life and bring you the peace of mind you want. I can see that you aren’t ready to sign up for that, but I have to be honest – that’s the only thing I am really interested in when it comes to your drinking.

CLIENT: No, I don’t hold it against you. But what am I supposed to do now?

THERAPIST: There are clinicians in our community who work with heavy drinkers to cut down their drinking. Sometimes they are successful. It can be a way to start making a change in your drinking.

CLIENT: You can’t do that with me? I’ve already gotten started with you.

THERAPIST: No because I don’t have those skills. But also because I am committed to abstinence as the best outcome for people with drinking problems. It’s the bottom line for me. I hope you will feel like my door is open to you if you ever decide you want to give up drinking in the future, or even just talk about it.

CLIENT: I appreciate that.

This therapist is walking the fine line between giving an opinion (the need for abstinence) and maintaining a respect for the client’s autonomy. Without compromising her own bottom line, the therapist is honest and genuine about her own belief in the need for abstinence and maintains her bottom line about pursuing any other goal.
in treatment. This type of respectful discussion is consistent with the principles of MI and avoids the possibility of provoking resistance from this client.

Conclusions

Combining MI with other therapeutic interventions requires frequent on-the-fly decisions on the part of the therapist about which elements of the mixture will prevail at any given time. It is our contention that previous combinations of MI and other treatments have sometimes overlooked the way in which these treatments can contradict each other and can therefore force therapists to make choices that cannot be derived from the treatments themselves. This can occur, for example, when a therapist must come to an agreement with a client about a target behavior for a cognitive behavioral therapy change plan and yet simultaneously support client autonomy in not making a commitment to change before being ready to do so. Which of these competing goals becomes the priority will depend on the therapist’s theoretical perspective and beliefs about how people change. When choice points such as this occur, the therapist must be clear about what guiding principles will be most important if the treatments are not harmonious. Alternatively, decision rules could be identified and priorities established that would allow therapists to proceed with confidence without having to reconsider a theoretical perspective at each choice point. For example, a client could be gently encouraged to proceed with behavior change despite ambivalence (leaning toward a cognitive behavioral approach) or to define ambivalence about change itself as the focus of the therapeutic session (leaning more toward a traditional MI approach). Defining decision rules for predictable choice points in blended treatments would have the advantage of facilitating replication as these hybrids are evaluated and disseminated, and would facilitate fluency and confidence on the part of therapists using them. Finding the boundary where MI and other treatments are compatible, or are not, is likely to become an even more interesting clinical question as plans go forward to blend MI with psychoanalytic, existential, and behavioral treatment approaches. The COMBINE Research Project has broken ground by showing that MI can be successfully combined with other treatment approaches and that the resulting intervention is not always seamless.

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Address correspondence to Theresa B. Movers, Ph.D., Psychology, Logan Hall, University of New Mexico, Albuquerque, NM 87131; e-mail: tmovers@unm.edu.

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