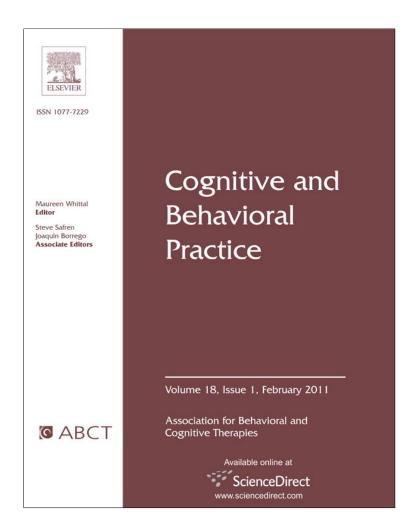
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Cognitive and Behavioral Practice 18 (2011) 74-81

# COMMENTARY



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## What Can Motivational Interviewing Do for You?

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Motivational Interviewing (MI) is a promising 25-year-old therapeutic approach that integrates relationship-building principles and more directive strategies to move clients toward behavioral change. A large and expanding number of controlled research studies of MI have demonstrated its efficacy for addictive behaviors ranging from use of alcohol, nicotine, cocaine, heroin, and marijuana to gambling. This commentary highlights how the articles in this special series have answered two interrelated remaining questions about MI: first, whether it works beyond addictions; second, whether it adds significantly to the efficacy of cognitive behavioral therapy (CBT) when combined with it as either a pretreatment or throughout treatment. The articles in this series provide excellent rationales for why MI should work for problems such as eating disorders, depression, anxiety, and suicide, and why combining it with CBT should enhance client outcomes for each of these areas. However, there is a paucity of research data—especially from clinical trials—to support the theories, leaving practitioners with a conflict between the two intertwined poles of practice and science.

OTIVATIONAL Interviewing (MI) is a promising 25- ${f M}$  year-old therapeutic approach that integrates the relationship-building principles of humanistic therapy (Rogers, 1951) with more active strategies targeted to the client's stage of change (Prochaska, DiClemente, & Norcross, 1992). It has been defined as a client-centered yet directive method for enhancing intrinsic motivation to change by exploring and resolving client ambivalence (Miller & Rollnick, 2002). Since publication of the first edition of the MI book (Miller & Rollnick, 1991), the efficacy of MI for alcohol and substance use disorders has been clearly demonstrated (Lundahl & Burke, 2009). Recently, MI and MI-related approaches have been extended to a variety of other clinical problems (Arkowitz, Westra, Miller, & Rollnick, 2008), yet many questions remain about its efficacy in these areas. After summarizing the evidence base for MI with addictions, the current commentary will consider how the articles in this special series shed light on two important and interrelated remaining questions about MI-first, whether it works for problems other than the addictions; and second, whether it specifically enhances the efficacy of cognitive behavioral therapies (CBT) in these domains.

## **Does MI Work for Addictions?**

A large and expanding number of controlled studies have demonstrated that MI is significantly (10% to 20%) more efficacious than no treatment and at least as

efficacious as other viable treatments for a wide variety of addictive problems, ranging from substance use to pathological gambling (Lundahl & Burke, 2009). There is a dose effect such that more sessions tend to produce more behavioral change, yet MI typically operates as a brief treatment with higher cost-effectiveness than the alternatives-with two to four sessions often yielding similar outcomes to comparison treatments three times as long (e.g., Project MATCH Research Group, 1997)-and MI appears durable up to 1 year posttreatment (Lundahl & Burke, 2009). MI has proven efficacious for clients regardless of problem severity, gender, or age, and it works in a variety of formats, possibly best as a pretreatment, a format in which it is used (Lundahl, Kunz, Tollefson, Brownell, & Burke, 2010). Finally, MI has been learned and implemented by practitioners of diverse professions, optimally via a 2-day interactive workshop followed by ongoing supervision and coaching (Miller, Yahne, Moyers, Martinez, & Pirritano, 2004).

## Why Should MI Work for Problems Outside of Addictions?

Solid theoretical rationales abound for using MI in areas beyond the addictions. Along with this special series, a recent book (Arkowitz, Westra, Miller, & Rollnick, 2008) shows that interest in MI and its application to a broad range of clinical problems is increasing sharply. In these applications, MI has been used either as a pretreatment or throughout the course of treatment for a wide range of clinical problems, including but not limited to generalized anxiety disorder (GAD), depression, posttraumatic stress disorder, suicidal behavior, obsessive-compulsive

<sup>1077-7229/10/74-81\$1.00/0</sup> 

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disorder (OCD), eating disorders, schizophrenia, and clients with dual diagnoses.

One possible source of the appeal of MI is that it addresses motivational problems that have long vexed the helping professions (Arkowitz & Miller, 2008). MI may also be valuable in exploring the client's ambivalence not only about treatment but about changing their own presenting complaints. In fact, MI has been suggested as a first step in many of the treatment strategies described in this special series to address the related issues of motivation and ambivalence, particularly the pros and cons of changing the client's symptoms of disordered eating, depression, or anxiety.

More specifically, MI may be optimal not only in resolving what is usually very high client ambivalence in eating disorders (Treasure & Schmidt, 2008), but also in initial eating symptom assessment where it may reduce the therapist's typical overestimation of the client's readiness or stage of change (Geller & Dunn, 2011). Further, there are often family or dyadic interaction sequences that maintain problematic eating behavior (Moreno, Selby, Aved, & Besse, 2000); one way to target problematic patterns of communication within the family is by exploring alternate ways of interacting, which can be done by teaching family members how to practice MI with each other (Burke, Vassilev, Kantchelov, & Zweben, 2002; Geller & Dunn). For anxiety and depression, MI may help therapists reach out to difficult-to-serve populationssuch as pregnant women or mothers of psychiatry ill children-as well as provide individualized feedback and psychoeducation (Zuckoff, Swartz, & Grote, 2008). MI also fits the symptoms of depression, which are centered around low motivation, and MI may benefit depressed people by helping to increase their activity levels (Arkowitz & Burke, 2008). In fact, a therapeutic relationship characterized by empathy as in MI has been shown to reduce depression (Arkowitz & Burke).

Due to its adaptability for brief (20 to 30 minute) treatments, MI may also help primary care physicians increase patient treatment compliance with pharmacotherapy for anxiety and depression, as a study in progress attempts to demonstrate (Robert Keeley, personal communication, July 1, 2009). In addition, MI's suitability for brief contact makes it a trenchant tool for health professionals who come into contact with suicidal hospital patients, where a decisional balance exercise-reasons for suicide and reasons to live-can lead into the development of a personal plan to make life worth living after a single session (Britton, Patrick, Wenzel, & Williams, 2011). MI may also be particularly valuable for the importance it places on supporting and preserving client autonomy, which is often paramount in crisis evaluation for suicidality (Zerler, 2008). Finally, in disorders such as schizophrenia, MI has components that address processes central to the major barriers to medication adherence—decision-making, cognitive processing, and the therapeutic relationship (McCracken & Corrigan, 2008).

## But Does MI Work for Problems Outside of Addictions?

Clinical trials of MI for disorders beyond addictions are still in their infancy. Six articles in past issues of this journal (Cognitive and Behavioral Practice, CBP) reference MI of which the first four include applications of MI outside the field of substance use disorders: a combined MI-CBT group treatment for parents at high risk for physically abusing their children (Runyon, Deblinger, & Schroeder, 2009); a group treatment for PTSD based on MI and the Stages of Change model (Murphy, Rosen, Cameron, & Thompson, 2002); MI integrated with CBT to enhance fathers' caring for their children (Crooks, Scott, Francis, Kelly, & Reid, 2006); using MI within a behavioral weight control program for obesity (DiLillo, Siegfried, & West, 2003); integrating MI with a behavioral intervention for prevention of prenatal alcohol exposure in women at high risk for alcohol-exposed pregnancies (Velasquez, Ingersoll, Sobell, Floyd, Sobell, & von Sternberg, 2009); and a review of how MI can help health care providers talk differently to their clients about their drinking (Sobell & Sobell, 2003). These past CBP articles, along with the chapters in the recent book by Arkowitz, Westra, et al. (2008) and the six articles in this special series, put forth sound reasons for using MI-on its own or combined with CBT-in these domains. However, there are few controlled clinical trials to assess these applications.

Despite the promising findings regarding the efficacy and dissemination of MI summarized above, the preponderance of the data bears primarily on the field of substance use disorders. The first meta-analysis (Burke, Arkowitz, & Menchola, 2003) included 30 controlled clinical trials of MI and found that 26 (87%) focused on the treatment of addictions (alcohol, nicotine, or other drugs). The most recent meta-analysis (Lundahl et al., 2010) included 132 empirical studies with 117 (89%) targeting addictions (alcohol, nicotine, marijuana, cocaine, heroin, and gambling); the other 11% of studies focused mainly on increasing healthy behaviors (e.g., diet and exercise), with one or two studies each in the areas of parenting practices, diet/ eating problems, and drinking safe water. Thus, research on MI still appears to be chiefly centered on its original application to the treatment of addictions, with almost 90% of clinical investigations being reported in that realm. As a result, we have precious little data to this point supporting the efficacy of MI for problem areas other than addictions (Lundahl & Burke, 2009).

#### Burke

## Why Should MI Add Anything to CBT Specifically?

The current special issue expands upon the wide clinical applications of MI (Arkowitz, Westra, et al., 2008) by specifically addressing whether MI can be profitably combined with CBT to enhance its efficacy for problems such as eating disorders (Geller & Dunn, 2011), OCD (Simpson & Zuckoff, 2011), GAD (Kertes, Westra, Angus, & Marcus, 2011), depression (Flynn, 2011), suicidality (Britton et al., 2011), and problem drinking (Moyers & Houck, 2011). These articles all converge on the same point regarding the potential value of modifying CBT, which is already an evidencebased treatment on its own for each of the above problems. Despite its empirical support, CBT is still hampered by high rates of relapse and attrition, which usually hover around 50% (Fairburn et al., 1995; Hollon, Thase, & Markowitz, 2002; Newman, Castonguay, Borkovec, Fisher, & Nordberg, 2008; Simpson, Huppert, Petkova, Foa, & Liebowitz, 2006; Tarrier, Taylor, & Gooding, 2008). CBT typically does not focus directly on issues of motivation or ambivalence, and so the addition of MI may plug a hole and thereby lead to increased treatment compliance (Arkowitz et al., 2008). There may be a complementary relationship between MI and CBT in which MI may work best to boost motivation for change whereas CBT may provide the necessary skills to take useful action in order to change (Heather, Rollnick, Bell, & Richmond, 1996). Moreover, there is surprisingly little in the literature about the style of conducting CBT, and it is possible that MI may formalize the process of doing good therapy (Arkowitz et al., 2008; Geller & Dunn, 2011 Simpson & Zuckoff, 2011) as well as rehumanize manualized CBT by boosting the relationship stance of the therapist (Flynn, 2011).

The articles in this series each describe in detail how MI can be used as a pretreatment for or integrated with CBT for a specific problem. Project COMBINE (Moyers & Houck, 2011) seeks to discover whether a combined treatment, which uses MI both as a pretreatment and as the underlying client-centered counseling informing the other treatment components (CBT and support groups), constitutes an efficacious intervention for problem drinking. For eating disorders (Geller & Dunn, 2011) and depression (Flynn, 2011), treatment models describe how MI can be profitably integrated into CBT whenever motivational issues arise. Three other models suggest using MI as a pretreatment for suicidality (Britton et al., 2011), OCD (Simpson & Zuckoff, 2011), and GAD (Kertes et al., 2011), respectively.

For eating disorders, MI may be valuable during CBT when motivational barriers arise to the various evidencebased strategies such as reducing compensatory responses to a binge, relapse prevention, or nonnegotiables like maintaining a certain body weight in anorexia (Geller & Dunn, 2011). Similarly, MI may be especially important in increasing adherence to exposure and response prevention for OCD, an efficacious but challenging and anxiety-provoking treatment (Simpson & Zuckoff, 2011). In GAD, MI may alter the therapeutic alliance in subsequent CBT to one of increased collaboration, thereby boosting homework compliance and thus positive treatment outcome (Kertes et al., 2011). Relatedly, MI may be synergistic to CBT for depression in its ability to increase initial adherence to treatment as well as homework compliance throughout therapy (Flynn, 2011). MI may also bolster the efficacy of behavioral activation for depression, which may be particularly useful for severely depressed clients (Flynn). With suicidal clients, MI can directly address motivation for treatment-the first phase in CBT for these clients (Wenzel, Brown, & Beck, 2009) that may be distinct from the motivation to live (Britton et al., 2011). Finally, due to its flexibility and fit with a wide range of treatment approaches, MI may be ideal as the underlying counseling style informing other interventions-e.g., CBT and support groups-in a multicomponent treatment package such as the Combined Behavioral Intervention (CBI; Moyers & Houck, 2011). In sum, the authors in this special series all agree that MI is an ideal intervention to combine with CBT due to its relationship stance and ability to boost treatment entry, adherence, and homework compliance, especially for unsavoury or difficult parts of the CBT treatment package, such as exposure. In fact, researchers have suggested for the past several years that adding MI to CBT is promising and clearly merits further investigation (Burke, Dunn, Atkins, & Phelps, 2004).

# Which MI Strategies Would Be Most Valuable to Add to CBT?

Four of the 6 articles in this series specifically describe what MI treatment might look like when combined with CBT for these clinical disorders. For eating disorders, Geller and Dunn (2011) present four clinical vignettes of using MI in or before treatment. Two of these vignettes illustrate how MI can be used as a pretreatment intake strategy prior to outpatient or residential treatment entry, a third shows how MI might be employed with a more chronic client (a 20-year anorexia sufferer), and the final one demonstrates how MI could be a valuable tool throughout CBT when roadblocks or motivational barriers to treatment arise. Each of these vignettes focuses almost exclusively on using MI to explore and resolve client ambivalence, one of its chief goals (Miller & Rollnick, 2002). With Lisa, MI helps the therapist explore the resistance side of the ambivalence and avoid the trap

of arguing for change when the client is already feeling "hounded" by significant others in her life about her eating issues. With Greta, Leanne, and Jane, who are each facing motivational barriers, the therapist explores both sides (resistance and change talk) of the ambivalence effectively. What could be added to these vignettes is the next step in MI treatment, which is to help the client build importance and confidence for change using rulers (scaling questions) or other open-ended questioning strategies before moving toward constructing a change plan in MI style.

Flynn (2011) includes three sample vignettes to illustrate how MI can be used throughout CBT for depression. The first vignette explains how to engage an ambivalent client in the very first meeting, starting with an open question ("How do you feel about being here?"). The second vignette demonstrates the use of the importance ruler and a follow-up open question to evoke potentially helpful strategies for increasing the client's activity level (i.e., behavioral activation). The final vignette shows how a therapist can use MI to negotiate a different homework assignment with a noncompliant client. Each of these cases reveals how a key open MIconsistent question-such as "what do you want to do?" or "what do you think you'll do that will work for you?"-can be used to move the client toward a change plan. For OCD, Simpson & Zuckoff, (2011) provide the general outline of pretreatment MI to explore and resolve ambivalence for several clients who were not willing to seek referrals for evidence-based treatments (CBT or pharmacotherapy). The authors delineate an MI that is flexible and adapted to the specific client. In two cases, the therapist explored resistance in one session and then change talk the very next. In another case, MI was used "backwards," with the client coming in and talking about change immediately but the therapist backing up to exploring the resistance in a subsequent session. The authors briefly allude to using importance rulers and moving in two of the three described cases to commitment to a change plan.

For suicidal clients, Britton et al. (2011) describe a single session 3-phase MI treatment that can be followed by CBT or any other interventions. The phases include exploring reasons for thinking about suicide, building motivation to live, and constructing a plan to make life worth living. According to the vignettes, Phase 1 consists mainly of reflective listening and summaries, whereas, in Phase 2, the therapist begins using more open questions and the importance ruler, culminating with a key MI question to move into Phase 3, such as, "What do you think would make your life worth living?" In the later phases (2 and 3) of the MI session, the therapist employs many affirmations—e.g., "you feel good about that" or "that makes sense to me"—and offers a menu of

treatment options in an effort to boost client confidence and thereby motivation to change. Note that none of these MI treatment vignettes—for eating disorders, OCD, depression, or suicidality—illustrated the use of the confidence ruler, another valuable MI tool that generally follows the importance ruler in clinical practice to build the client's self-efficacy and belief in the possibility of change (Miller & Rollnick, 2002).

## What Problems Might Arise in Combining MI With CBT?

Although not an explicit focus of this special issue, Moyers and Houck (2011) were the only authors who noted potential problems or challenges in combining MI with CBT. Project COMBINE therapists reported difficulty deciding when to move forward with a concrete treatment plan to address the client's problem drinking, with the perception that MI and CBT/protocol philosophies were not always in agreement. Similarly, these therapists reported discomfort in promoting abstinence as a mandatory treatment goal, which they saw as incompatible with an MI approach. For instance, Moyers and Houck illustrate one possible choice point via a vignette wherein the client stated, "I think that might be all I need" and the project therapist responds, as per study protocol, by pushing a specific "mood management" module that is part of the combined intervention. Moyers and Houck point out that a more MI-consistent approach would have been to tentatively agree with the client and reflect their apparent decision ("You might be right...you seem to have a clear direction in mind"), thereby encouraging autonomy as well as evoking potential strategies for change from the client.

Whereas the above conflict largely fades in clinical practice without the need for a standard treatment protocol (Moyers & Houck, 2011), there is another problem that may arise when MI is used throughout the course of CBT. Although it is feasible to "guide cognitivebehavior therapy towards ends derived from the client's own core values, rather than towards a single, preconceived notion of which beliefs are 'rational' and which 'irrational'" (Miller, 1988, p. 54), it may confuse the therapist to do CBT in such an MI style, because it would be difficult to ascertain which client beliefs to target for restructuring. This could be especially problematic if the CBT therapist was trained to prioritize certain irrational thoughts-those less compatible with the client's core values-above others (e.g., "I must not gain weight"). Accordingly, when therapists attempt to use MI as a permeating style throughout treatment, the most challenging aspect might be deciding when and how often to insert their own considerable expertise into the process versus allowing their client to direct the sessions, course of treatment, and homework assignments.

Problems may also arise when MI is used as a pretreatment for CBT, as the therapeutic interaction may shift from a humanistic to a somewhat more expert/ didactic model. In other words, clients who resonate strongly with the MI style may have difficulty switching to CBT when the pretreatment ends. In support of this, clients were much more likely to state that they found their CBT therapist to be likeable, caring, and encouraging if they did not have pretreatment MI (Kertes et al., 2011), which suggests that MI may have raised client expectations for a particular interactional style that was not fully met in their subsequent CBT sessions. Despite these potential challenges, the authors in this special series each make convincing cases that MI should be a valuable addition to CBT, either as a pretreatment or used throughout therapy.

#### But Does MI Add Anything to CBT?

As described above, it may be that MI and CBT have additive effects because they work through different mechanisms (Burke et al., 2004). Unfortunately, there is little data to specifically prove the benefit of adding MI to CBT. Whereas research is under way to test many of the MI-CBT treatment hybrids delineated in this special series, in two out of these six areas (suicidality and depression), there have not yet been any clinical trials addressing the question of whether MI adds significantly to existing CBT for these problems. Further, although MI is well supported for substance use problems, only two studies have examined the utility of combining MI with CBT in this realm. These two clinical trials added one or two sessions of MI as a pretreatment to 12 sessions of CBT and revealed that the combined intervention yielded small additive effects on a variety of outcome measures at follow-up (e.g., reduced alcohol consumption in Connors, Walitzer, & Dermen, 2002 with d=.23, and reduced cocaine-positive urine tests in Stotts, Schmitz, Rhoades, & Grabowski, 2001 with d=.30). The Project COMBINE data (Moyers & Houck, 2011), which is not yet available, will not reveal the unique effect of MI because the study did not use a dismantling design and so it did not compare a treatment plus MI to that same treatment without MI.

For eating disorders and OCD, there have been a total of six clinical trials, but these have been pilot studies with few directly testing the addition of MI to CBT—i.e., comparing an MI plus CBT group to a CBT group alone to isolate the impact of MI. Specifically, two trials compared MI plus a self-help handbook/manual to the handbook/manual alone for eating disorders; one found that the combination was superior and the other did not (Cassin, von Ranson, Heng, Brar, & Wojtowicz, 2008; Dunn, Neighbors, & Larimer, 2006). For OCD, one study showed that a 4-session multimodal intervention—including 2 sessions of MI-as a pretreatment for CBT significantly boosted treatment entry (d=.73) but did not decrease dropout rates (Maltby & Tolin, 2005). The authors in this series (Simpson & Zuckoff, 2011) present the results of their recent pilot study wherein a 4-session MI was used as a pretreatment for OCD; 3 out of the 6 challenging clients-previous treatment failures or refusers-pursued further evidence-based treatment (CBT and/or pharmacotherapy), though none of the 3 clients who were compulsive hoarders did so. As in their previous pilot study that tested MI used both as a pretreatment and throughout CBT for OCD (Simpson, Zuckoff, Page, Franklin, & Foa, 2008), there were only 6 participants and no control group. However, this recent case/pilot study showed that clients who are unwilling to seek referrals for evidence-based treatment for their OCD may nevertheless be willing to have MI sessions to discuss their ambivalence and, as a result, a portion may decide to enter treatment after all.

For GAD, there have been two published controlled clinical trials that isolated the unique contribution of MI (Westra & Dozois, 2006; Westra, Arkowitz, & Dozois, 2009). Both of these clinical trials converge on the point that a 3- or 4-session MI pretreatment significantly decreased worry symptoms following CBT for GAD (ds=.54 and .53, respectively), likely by boosting homework compliance. In addition, the process study conducted by Kertes et al. (2011) reveals that clients perceive MI and CBT as a good fit, describe themselves as more active participants in the treatment process, and find evidence-based treatment strategies such as exposure more helpful following a pretreatment of MI for GAD. However, neither of the two clinical trials above controlled for treatment length, so the MI-CBT group had 17 or 18 hours of total treatment versus just 14 for the control (CBT only) group. In fact, the effect size for MI alone on worry reduction (i.e., assessed after 4 sessions of MI but before CBT started) was almost as high as the overall effect size for the MI-CBT combination (ds=.44 versus .53 respectively; Westra et al., 2009). Still, the findings for using MI as a pretreatment for GAD are more promising than for any of the other problem areas discussed in this special issue, although they await replication by an independent research team.

### So What Can MI Do for You?

The articles in this special series begin to address the question of what MI can do for you in your clinical practice; specifically, whether you should consider integrating MI into your CBT if you treat clients with a wide range of problems outside of addictions. What these articles illuminate most profoundly is the clear rift between the theory and the research; whereas the rationales put forth in this issue make a convincing case

#### Commentary

for using MI with CBT for disorders ranging from depression and suicidality to anxiety and eating disorders, the extant data from clinical trials remain sparse and equivocal. There is a parallel to this dilemma in combining CBT with pharmacotherapy, where theoretical mechanisms clearly suggest that the combination should work better than either treatment alone, yet the research for decades failed to provide strong support for the superiority of the combined treatment approach (e.g., Kobak, Greist, Jefferson, Katzelnick, & Henk, 1998). However, research for combined treatments may finally be catching up to the theoretical foundations underlying their use as one meta-analysis revealed that combined treatment (medication plus adjuvant psychotherapy) does improve response with selected clients and may enhance its breadth and stability (Hollon, Jarrett, Nierenberg, Thase, Trivedi, & Rush, 2005). It is possible that we have come up against some variation of the "Dodo Bird" (e.g., Wampold et al., 1997) wherein it is difficult to empirically demonstrate the superiority of combined treatment approaches over either treatment alone. Thus, clinicians and therapists are left to decide whether to do what they believe to be true based on sound ideas and psychological principles-i.e., use MI (and/or pharmacotherapy) with their CBT to enhance client outcome—or adhere as closely as possible to the scientific research and available clinical trials and thus, for now, just stick with their CBT as is.

Of course, the best way to ultimately resolve this ambivalence is to build on the groundwork that the scientists in this special series have lain, which has paved the way for controlled clinical trials of MI-alone and/or in combination with CBT-for a wide variety of problems outside of addictions. These future studies should include dismantling designs, such as comparing MI-CBT to CBT alone, whereby the additive effect of MI can be computed, and ideally should control for length of treatment by equalizing session numbers (e.g., comparing a 4-session MI plus 12-session CBT to a 16-session CBT). In addition, future trials should test alternate models of using MI with CBT to determine which is optimal for specific disorders -i.e., by comparing MI used as a pretreatment for CBT to MI used throughout treatment for CBT-as well as examine potential mediators and moderators of outcome such as symptom severity (Westra et al., 2009) or client resistance/anger (Flynn, 2011). A related concern is to investigate which of these two models-pre- or throughout treatment-is more practical for specific settings and training programs, as there are no data yet on which model might be easiest and most cost-effective to learn and to implement.

Another way to resolve this ambivalence is to consider the possibility that there may be other salutary effects of using MI with CBT beyond symptom outcome measures for both practitioners and their clients. For instance, in some cases, the client's deciding on and committing to a course of action may be the most appropriate target measure rather than symptom reduction or even behavioral action such as starting treatment (Simpson & Zuckoff, 2011). In addition, future research could assess not just treatment compliance but also active client involvement with the moment-to-moment therapy process within sessions (Kertes et al., 2011). Further, there is already evidence (Kertes et al.) that clients may have a more collaborative and fulfilling treatment experience when MI precedes their usual course of CBT. Practitioners who spend time integrating MI with their CBT may also come to enjoy their work more if their clients are less resistant, more compliant with homework, and more actively engaged in the treatment process. Some anecdotal reports from primary care physicians suggest that this may be the case (Robert Keeley, personal communication, June 23, 2009), as one described the spontaneous "MI smile" from their patients as they incorporate MI into their medical visits. Of course, this too is ultimately an empirical question to be answered in a future process study like Kertes et al., but by interviewing providers in addition to clients. In the end, it is up to the individual practitioner to decide-in true MI style-whether the philosophy and principles of MI fit with his or her professional goals and core values. If they do, then perhaps MI can do something for you after all.

#### References

- Arkowitz, H., & Burke, B. L. (2008). Motivational interviewing as an integrative framework for the treatment of depression. In H. Arkowitz, H. A. Westra, W. R. Miller, & S. Rollnick (Eds.), *Motivational interviewing in the treatment of psychological problems* (pp. 145–172). New York: Guilford Press.
- Arkowitz, H., & Miller, W. R. (2008). Learning, applying, and extending motivational interviewing. In H. Arkowitz, H. A. Westra, W. R. Miller, & S. Rollnick (Eds.), *Motivational interviewing in the treatment of psychological problems* (pp. 1–25). New York: Guilford Press.
- Arkowitz, H., Miller, W. R., Westra, H. A., & Rollnick, S. (2008). Motivational interviewing in the treatment of psychological problems: Conclusions and future directions. In H. Arkowitz, H. A. Westra, W. R. Miller, & S. Rollnick (Eds.), *Motivational interviewing in the treatment of psychological problems* (pp. 324–342). New York: Guilford Press.
- Arkowitz, H., Westra, H. A., Miller, W. R., & Rollnick, S. (Eds.). (2008). Motivational interviewing in the treatment of psychological problems New York: Guilford Press.
- Britton, P. C., Patrick, H., Wenzel, A., & Williams, G. C. (2011). Integrating motivational interviewing and self-determination theory with cognitive behavioral therapy to prevent suicide. *Cognitive and Behavioral Practice*, 18, 16–27.
- 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.
- Burke, B. L., Vassilev, G., Kantchelov, A., & Zweben, A. (2002). Motivational interviewing with couples. In W. R. Miller, & S. Rollnick (Eds.), *Motivational interviewing: Preparing people for change* (pp. 347–361, 2nd ed.) New York: Guilford Press.

# Author's personal copy

- Burke, B. L., Dunn, C. W., Atkins, D., & Phelps, J. S. (2004). The emerging evidence base for motivational interviewing: A metaanalytic and qualitative inquiry. *Journal of Cognitive Psychotherapy*, 18, 309–322.
- Cassin, S. E., von Ranson, K. M., Heng, K., Brar, J., & Wojtowicz, A. E. (2008). Adapted motivational interviewing for women with binge eating disorder: A randomized controlled trial. *Psychology of Addictive Behaviors*, 22, 417–425.
- Connors, G. J., Walitzer, K. S., & Dermen, K. H. (2002). Preparing clients for alcoholism treatment: Effects on treatment participation and outcomes. *Journal of Consulting and Clinical Psychology*, 70, 1161–1169.
- Crooks, C., Scott, K., Francis, K., Kelly, T., & Reid, M. (2006). Eliciting change in maltreating fathers: goals, processes, and desired outcomes. *Cognitive and Behavioral Practice*, 13, 71–81.
- DiLillo, V., Siegfried, N., & West, D. (2003). Incorporating motivational interviewing into behavioral obesity treatment. *Cognitive and Behavioral Practice*, 10, 120–130.
- Dunn, E. C., Neighbors, C., & Larimer, M. E. (2006). Motivational enhancement therapy and self-help treatment for binge eaters. *Psychology of Addictive Behaviors*, 20, 44–52.
- Fairburn, C. G., Norman, P. A., Welch, S. L., O'Connor, M. E., Doll, H. A., & Peveler, R. C (1995). A prospective study of outcome in bulimia nervosa and the longterm effects of three psychological treatments. *Archives of General Psychiatry*, 52, 304–312.
- Flynn, H. A. (2011). Setting the stage for the integration of motivational interviewing with cognitive behavioral therapy in the treatment of depression. *Cognitive and Behavioral Practice*, 18, 46–54.
- Geller, J., & Dunn, E. C. (2011). Integrating motivational interviewing and cognitive behavioral therapy in the treatment of eating disorders: Tailoring interventions to patient readiness for change. *Cognitive and Behavioral Practice*, 18, 5–15.
- Heather, N., Rollnick, S., Bell, A., & Richmond, R. (1996). Effects of brief counseling among heavy drinkers identified on general hospital wards. *Drug & Alcohol Review*, 15, 29–38.
- Hollon, S. D., Jarrett, R. B., Nierenberg, A. A., Thase, M. E., Trivedi, M., & Rush, A. J. (2005). Psychotherapy and Medication in the Treatment of Adult and Geriatric Depression: Which Monotherapy or Combined Treatment? *Journal of Clinical Psychiatry*, 66, 455–468.
- Hollon, S., Thase, M. E., & Markowitz, J. C. (2002). Treatment and prevention of depression. *Psychological Science in the Public Interest*, 3 (2), 39–77.
- Kertes, A., Westra, H. A., Angus, L., & Marcus, M. (2011). The Impact of motivational interviewing on client experiences of cognitive behavioral therapy for generalized anxiety disorder. *Cognitive and Behavioral Practice*, 18, 55–69.
- Kobak, K. A., Greist, J. H., Jefferson, J. W., Katzelnick, D. J., & Henk, H. J. (1998). Behavioral versus pharmacological treatments of obsessive compulsive disorder: A meta-analysis. *Psychopharmacology*, 136, 205–216.
- Lundahl, B. W., & Burke, B. L. (2009). The effectiveness and applicability of motivational interviewing: A practice-friendly review of four meta-analyses. *Journal of Clinical Psychology: In* session, 65, 1232–1245.
- Lundahl, B. W., Kunz, C., Tollefson, D., Brownell, C., & Burke, B. L. (2010). Meta-analysis of Motivational interviewing: Twenty Five years of research. *Research on Social Work Practice*, 20, 137–160.
- Maltby, N., & Tolin, D. F. (2005). A brief motivational intervention for treatment-refusing OCD patients. *Cognitive Behavioral Therapy*, 34, 176–184.
- McCracken, S. G., & Corrigan, P. W. (2008). Motivational interviewing for medication adherence in individuals with schizophrenia. In H. Arkowitz, H. A. Westra, W. R. Miller, & S. Rollnick (Eds.), *Motivational interviewing in the treatment of psychological problems* (pp. 249–276). New York: Guilford Press.
- Miller, W. R. (1988). Including clients' spiritual perspectives in cognitive behavior therapy. In W. R. Miller, & J. E. Martin (Eds.), Behavior therapy and religion: Integrating spiritual and behavioral approaches to change (pp. 43–55). Newbury Park, CA: Sage.
- Miller, W. R., & Rollnick, S. (1991). Motivational Interviewing: Preparing People to Change Addictive Behavior. New York: Guilford Press.

- Miller, W. R., & Rollnick, S. (2002). Motivational interviewing: Preparing people for change, 2<sup>nd</sup> ed. New York: Guilford Press.
- Miller, W. R., Yahne, C. E., Moyers, T. B., Martinez, J., & Pirritano, M. (2004). A randomized trial of methods to help clinicians learn motivational interviewing. *Journal of Counseling and Clinical Psychology*, 72, 1050–1062.
- Moreno, J. K., Selby, M. J., Aved, K., & Besse, C. (2000). Differences in family dynamics among anorexic, bulimic, obese and normal women. *Journal of Psychotherapy in Independent Practice*, 1, 75–87.
- Moyers, T. B., & Houck, J. (2011). Combining motivational interviewing with cognitive-behavioral treatments for substance abuse: Lessons from the COMBINE Research Project. *Cognitive and Behavioral Practice*, 18, 38–45.
- Murphy, R., Rosen, C., Cameron, R., & Thompson, K. (2002). Development of a group treatment for enhancing motivation to change PTSD symptoms. *Cognitive and Behavioral Practice*, 9, 308–316.
- Newman, M. G., Castonguay, L. G., Borkovec, T. D., Fisher, A. J., & Nordberg, S. S. (2008). An open trial of integrative cognitive therapy for generalized anxiety disorder. *Psychotherapy*, 45, 135–147.
- Prochaska, J. O., DiClemente, C. C., & Norcross, J. C. (1992). In search of how people change: Applications to addictive behaviors. *American Psychologist*, 47, 1102–1114.
- Project MATCH Research Group. (1997). Matching alcoholism treatments to client heterogeneity: Project MATCH posttreatment drinking outcomes. *Journal of Studies on Alcohol, 58*, 7–29.
- Rogers, C. R. (1951). Client-centered therapy. Boston: Houghton-Mifflin.
- Runyon, M. K., Deblinger, E., & Schroeder, C. M. (2009). Pilot evaluation of outcomes of combined parent-child cognitivebehavioral group therapy for families at risk for child physical abuse. *Cognitive and Behavioral Practice*, 16, 101–118.
- Simpson, H. B., Huppert, J. D., Petkova, E., Foa, E. B., & Liebowitz, M. R. (2006). Response versus remission in obsessive-compulsive disorder. *Journal of Clinical Psychiatry*, 67(2), 269–276.
- Simpson, H. B., & Zuckoff, A. (2011). Using motivational interviewing to enhance treatment outcome in people with obsessive-compulsive disorder. *Cognitive and Behavioral Practice*, 18, 28–37.
- Simpson, H. B., Zuckoff, A., Page, J. R., Franklin, M. E., & Foa, E. B. (2008). Adding motivational interviewing to exposure and ritual prevention for obsessive-compulsive disorder: An open pilot trial. *Cognitive Behaviour Therapy*, 37, 38–49.
- Sobell, L., & Sobell, M. (2003). Using motivational interviewing techniques to talk with clients about their alcohol use. *Cognitive* and Behavioral Practice, 10, 214–221.
- Stotts, A. L., Schmitz, J. M., Rhoades, H. M., & Grabowski, J. (2001). Motivational interviewing with cocaine with cocaine-dependent patients: A pilot study. *Journal of Consulting and Clinical Psychology*, 69, 858–862.
- Tarrier, N., Taylor, K., & Gooding, P. (2008). Cognitive-behavioral interventions to reduce suicide behavior: A systematic review and meta-analysis. *Behavior Modification*, 32, 77–108.
- Treasure, J., & Schmidt, U. (2008). Motivational interviewing in the management of eating disorders. In H. Arkowitz, H. A. Westra, W. R. Miller, & S. Rollnick (Eds.), *Motivational interviewing in the* treatment of psychological problems (pp. 194–224). New York: Guilford Press.
- Velasquez, M. M., Ingersoll, K. S., Sobell, M. B., Floyd, R. L., Sobell, L. C., & von Sternberg, K. (2009). A dual-focus motivational intervention to reduce the risk of alcohol-exposed pregnancy. *Cognitive and Behavioral Practice*, 16, 101–108.
- Wampold, B. E., Mondin, G. W., Moody, M., Stich, F., Benson, K., & Ahn, H. (1997). A meta-analysis of outcome studies comparing bona fide psychotherapies: Empirically, 'all must have prizes.'. *Psychological Bulletin*, 122, 203–215.
- Wenzel, A., Brown, G. K., & Beck, A. T. (2009). Cognitive therapy for suicidal patients: Scientific and clinical applications. Washington, DC: APA Books.
- Westra, H. A., Arkowitz, H. A., & Dozois, D. J. A. (2009). Adding a motivational interviewing pretreatment to cognitive behavioral therapy for generalized anxiety disorder: A preliminary randomized controlled trial. *Journal of Anxiety Disorders*, 23, 1106–1117.

#### Commentary

- Westra, H. A., & Dozois, D. J. A. (2006). Preparing clients for cognitive behavioral therapy: A randomized pilot study of motivational interviewing for anxiety. *Cognitive Therapy and Research*, 30, 481–498.
- Zerler, H. (2008). Motivational interviewing and suicidality. In H. Arkowitz, H. A. Westra, W. R. Miller, & S. Rollnick (Eds.), Motivational interviewing in the treatment of psychological problems (pp. 173–193). New York: Guilford Press.
- Zuckoff, A., Swartz, H. A., & Grote, N. K. (2008). Motivational interviewing as a prelude to psychotherapy of depression. In H. Arkowitz, H. A. Westra, W. R. Miller, & S. Rollnick (Eds.),

Motivational interviewing in the treatment of psychological problems (pp. 109–144). New York: Guilford Press.

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Received: July 28, 2009 Accepted: August 8, 2009 Available online 13 April 2010