CHAPTER 1

Learning, Applying, and Extending Motivational Interviewing

William R. Miller
Hal Arkowitz

Since the first clinical description of motivational interviewing (MI; Miller, 1983), research and clinical applications have blossomed like wildflowers. From its original use with problem drinkers, MI is now being implemented in a broad array of other applications including health promotion, social work, psychotherapy, coaching, medicine, dentistry, and education. In this chapter we offer an overview of MI and the ways it has been used in clinical practice, and then we address the evidence base, why MI works, and how clinicians learn it.

Motivation in Clinical Practice and Research

The concept of motivation has played a significant role in the history of psychology (Cofer & Apley, 1964; Myers, 2011; Petri & Govern, 2012), though this scientific knowledge base has seldom been applied in psychotherapy. The concept of motivation is particularly pertinent when clients seem "stuck." A traditional therapeutic view is that such "stuckness" represents resistance to change. Clients are sometimes said to be resistive, oppositional, or "in denial," terms that have a pejorative connotation

implying pathology and willful (even if unconscious) obstruction of the therapist's benevolent efforts. Schools of psychotherapy have had differing views on the nature and origins of resistance and how to work with it. Focusing instead on the psychological dynamics of motivation can invoke a more positive emphasis on how and why people *do* change and how therapists can facilitate it (Engle & Arkowitz, 2006; Miller, 1985).

Social psychologist Kurt Lewin (1935) described various motivational conflicts (such as approach–avoidance) whereby people can be immobilized by ambivalence. Rather than being a pathological phenomenon, ambivalence is a normal and common human condition whereby people simultaneously want and do not want something. Clients who seek therapy are often ambivalent about change, and their motivation may ebb and flow during the course of treatment. MI is a method for helping clients to get unstuck and resolve such ambivalence in favor of positive change.

Within the transtheoretical model of change (Prochaska & Norcross, 2013), ambivalence is a normal process on the road to change. In fact, ambivalence (the contemplation stage) is a step forward from the earlier precontemplation stage, where change is not even being considered. Many therapies and therapists are prepared to help clients who have already progressed two steps further to the action stage—but what about those who are not yet ready for change? In addiction treatment, such clients were once told to go away and come back when they were motivated. That's not good enough. Helping people to work through ambivalence and readiness for change is an important therapeutic skill, enabling one to work with a broader range of clients than just those who are already sufficiently "motivated."

Now, consider the interpersonal dynamic when a client who is ambivalent about change sits down to talk with a therapist who wants to promote change. Miller and Rollnick (2013) have described a natural "righting reflex" of professional helpers to educate, persuade, and advise clients about change. Doing so takes up one side of the client's ambivalence, the prochange side. A predictable result is for the person to then respond with the other side of ambivalence, "Yes, but . . . " If the therapist reciprocates with counterargument, he or she has thereby in essence externalized the person's ambivalence, with the clinician advocating for change while the client argues against it. There are both theoretical and empirical reasons to be concerned that this pattern is countertherapeutic, actually *decreasing* clients' commitment to change.

Daryl Bem (1967) posited that, from a conceptual perspective,

people learn what they believe in the same way that others do, namely, by hearing what they say. If a noncoercive context (such as counterattitudinal role play) causes them to defend a particular position, they become more committed to that position. Bem's self-perception theory offered an alternative explanation for the large literature on cognitive dissonance (Festinger, 1957). It is also clear that external pressure can undermine the desire to change. Brehm and Brehm (1981) adduced that an aversive state of reactance arises when people perceive a threat to their behavioral freedom. One motivational response is to intensify one's attitudes and behaviors in opposition to the persuasion or coercion.

Empirical evidence can be derived from studies of psycholinguistic processes in MI. In spontaneous speech, clients' ambivalence is represented by the balance of change talk (verbalizations favoring change) and sustain talk (favoring the status quo). The ratio of change talk to sustain talk during treatment sessions predicts the likelihood of subsequent behavior change (Moyers, Martin, Houck, Christopher, & Tonigan, 2009). This finding parallels similar ones from the transtheoretical model that movement from contemplation to action is signaled by an increase in the pros relative to the cons of change (Prochaska, 1994). This relationship might be of only passing interest ("Motivated people are the ones who change") were it not that levels of client change talk and sustain talk or resistance are strongly influenced by therapist responses, as demonstrated in both correlational (Bertholet, Faouzi, Gmel, Gaume, & Daeppen, 2010; Daeppen, Bertholet, Gmel, & Gaume, 2007; Gaume, Bertholet, Faouzi, Gmel, & Daeppen, 2010; Moyers & Martin, 2006; Moyers et al., 2009) and experimental studies (Glynn & Moyers, 2010; Miller, Benefield, & Tonigan, 1993; Patterson & Forgatch, 1985). Thus, if therapists counsel in a way that evokes more sustain talk or "resistance" than change talk, clients are less likely to change. In contrast, change is promoted by differentially evoking from clients their own change talk.

Related findings from social psychology are found in the literature on decisional balance. As mentioned above, a person's balance of pros to cons (a passive *measure* of decisional balance) reflects readiness for and probability of change. As a clinical procedure, however, decisional balance involves actively evoking and exploring *all* the pros and cons of change, thus causing clients to voice both change talk and sustain talk. Clinical studies indicate that doing this with people who are ambivalent consistently *decreases* their commitment to change (Miller & Rose, 2015), perhaps by perpetuating rather than resolving ambivalence.

What Is MI?

MI is a particular way of having a conversation about change so that it is the client rather than the clinician who voices the arguments for change (Miller, 1983; Miller & Rollnick, 2013). It is strongly rooted in the person-centered approach of Carl Rogers (1951, 1959, 1980) in its emphasis on understanding the client's internal frame of reference and concerns. In both MI and client-centered counseling the therapist provides the conditions for growth and change by communicating attitudes of acceptance and accurate empathy.

MI can be thought of as an evolution of client-centered counseling. It differs from a classic "nondirective" approach in that there is clear direction toward one or more specific outcome goals, and the therapist uses systematic strategies to move toward those goals. Usually it is the client who brings the change goal(s), although in certain contexts (such as addiction treatment or probation) the clinician may by role have change goals that the client does not necessarily share, at least at the outset.

Four Processes of MI

MI is now described as comprising four processes. The first of these is *engaging*, developing a therapeutic alliance that facilitates working together. Client-centered counseling skills are prominent here from the very beginning. A second process is *focusing*, clarifying the goals and direction of counseling. With a clear goal in place, the *evoking* process involves eliciting the client's own motivations for change. It is here that the therapist attends in particular to the client's change talk, seeking to evoke, understand, reflect, explore, and summarize it. When there seems to be sufficient readiness for change MI proceeds to the fourth process of *planning*. Though the four processes sound linear, in practice they are quite recursive. One may double back from planning to evoking if motivation seems to wane. It is common for the focus of consultation to change, and at times it is important to strengthen engagement. Somewhat different skills are involved in each process, though the client-centered engaging skills form a foundation throughout MI.

Underlying Spirit of MI

There is also strong overlap between a person-centered approach and what the codevelopers have described as the underlying *spirit* of MI

(Miller & Rollnick, 2013; Rollnick & Miller, 1995). Without this larger mindset and "heartset" in practice, MI can be confused with and reduced to a set of techniques. Accurate empathy has been a key element in MI from the start (Miller, 1983) and is linked to therapeutic efficacy (Moyers & Miller, 2013). Empathy is central to the first of four fundamentals of the spirit of MI: *acceptance*, which also includes honoring clients' autonomy, affirming their strengths, and respecting each person's absolute worth as a human being. A second component of MI spirit is an attitude of *partnership*, a collaboration between the clinician's expertise and clients' own expertise about themselves. The component of *compassion* is the intention to give primacy to the client's own welfare, growth, and best interests. Finally *evocation* is the mindset of calling forth the client's own wisdom, values, ideas, and plans. Evocation is the opposite of a deficit model—that the client is lacking something that the therapist needs to install. Rather than communicating "I have what you need, and I will give it to you," the underlying message in MI is "You have what you need, and together we will find it."

Compatibility with Other Methods

MI was never intended to be a comprehensive psychotherapy. It is a therapeutic tool for addressing the common issue of ambivalence about change. Miller (1983) first conceptualized it as a prelude to or preparation for treatment, and a surprise in early studies was that after MI clients often proceeded to change their drinking on their own without seeking further treatment (Miller et al., 1993; Miller, Sovereign, & Krege, 1988). Thus MI is sometimes practiced as a free-standing treatment, often as a brief opportunistic intervention. More commonly, though, MI is being combined with other treatments such as cognitive-behavioral therapies (Longabaugh, Zweben, LoCastro, & Miller, 2005). A meta-analysis found that MI had the most enduring effects when it was combined with another active treatment (Hettema, Steele, & Miller, 2005).

In one common adaptation known as motivational enhancement therapy (MET), the client is given personal feedback based on individual results from standardized assessment measures (Ball, Todd, et al., 2007; Miller, Zweben, Diclemente, & Rychtarik, 1992; Stephens, Babor, Kadden, & Miller, 2002). This feedback, which concerns the client's level of severity on target symptoms compared to norms, is delivered in an MI style. MET may be particularly useful in working with clients at a "precontemplation" level, who perceive little or no reason to change (Miller & Rollnick, 2013).

Basic Engaging Skills of MI

Four clinical microskills derived from client-centered counseling are used throughout MI, abbreviated by the mnemonic acronym OARS. The *O* component is to ask *Open* questions that give clients latitude in how to respond. Often intake interviews consist of a long litany of closed, short-answer questions that leave the client in a fairly passive role: "I ask the questions, and you give me the information I want." Carl Rogers's tongue-in-cheek skepticism about assessment was that it's of limited use because the client already knows all this! Beyond the asymmetrical power relationship of question and answer, this approach also implies that once you have enough information then you will have the solution. MI generally avoids this "expert role" where the therapist pretends to know more about clients than they do themselves. If change is to be integrated into people's daily lives, their own expertise about themselves is a vital resource. There are also informal guidelines to limit questioning, such as not to ask three questions in a row (even open questions).

A is for *Affirming*. In MI, clinicians watch for and affirm clients' strengths and abilities. Each step in the right direction, no matter how small, is recognized and affirmed. Clients are often asked to describe their own strengths, a "self-affirmation" process that tends to strengthen therapeutic alliance and reduce defensiveness. Rather than focusing on pathology or criticizing shortcomings, the clinician seeks to "catch people doing something right." This affirming of strengths and efforts is consistent with communicating positive regard. Some simple examples of affirmations are "It took courage to do that" and "That's a really good idea."

Perhaps the most frequently used microskill in MI is *Reflection,* a key method for experiencing and communicating accurate empathy. Simple reflections repeat all or part of what the client said. Though helpful at times, they are quite limited and often feel unnatural. Therapeutic momentum is much better promoted through complex reflections that make a guess about what the person means but has not quite said yet. One way to think about this is "continuing the paragraph"—not repeating what the client has just said but instead saying what *might* be the next phrase or sentence in the paragraph. The goal is to understand clearly how clients are experiencing their reality and to reflect that understanding back to them in a way that encourages continued experiencing.

Many therapists learn about reflective listening as part of their early training in basic interviewing skills. It is easy to underestimate the difficulty of skillful empathic reflection. High-quality reflective listening is a

core skill in MI and in the person-centered approach more generally. The majority of responses from a skillful MI practitioner should be reflective guesses about the client's meaning. It can be a challenge for novices as well as experienced professionals to rely primarily on empathic reflection rather than asking questions, offering advice, and relating in other ways that impose an external frame of reference.

Finally, the *S* in OARS is a reminder to *Summarize*. Summaries play an important role in client-centered counseling and have more particular uses in MI. They not only show that you have been listening and value what clients say enough to remember it; good summaries also link material together and can help emphasize certain points.

Beyond the OARS, MI includes a particular way of offering information and advice when appropriate. The most general guideline is to offer information or advice *with permission* and not tell clients what they already know. A client may ask you for suggestions ("What do you think I should do?"), and you can ask directly for permission ("Would it be helpful if I told you some things that other people have done that worked for them?"). Such offerings in MI are often accompanied by autonomy-supporting statements like "You may or may not agree" or "I don't know whether this will concern you or not—it's up to you, really." Rather than downloading an uninterrupted sequence of information, the interviewer offers it in small chunks, checking in regularly for the client's own responses and perceptions, a sequence that Rollnick has termed "elicit–provide–elicit" (Rollnick, Miller, & Butler, 2008).

Focusing

Sometimes the focus for conversations about change is set by the context. A person who walks into a smoking cessation clinic does not wonder what the topic of conversation will be. In more general health and social services it is usually the client who offers presenting concerns to be addressed. Then there is the situation where the clinician has a focus or concern that the client may not share. Brief opportunistic interventions are of this kind. A patient comes to a clinic wanting relief from a cough and sore throat, and the physician wants to talk about smoking. Probation officers and disciplinary administrators regularly enter into conversations about change with less-than-eager participants. Many clients are referred to addiction treatment services by the courts or relatives and offer mostly sustain talk at the beginning. MI can be used in any of these circumstances to move toward an identified goal. The focusing process is

to identify mutually acceptable goals. When a change goal is prescribed by the context or a client is ambivalent, a challenge is to find the client's own motivation to move toward that goal. That is the process of evoking.

Evoking

Evoking is the process that is most unique to MI. Having identified a clear focus for the conversation about change, the clinician proceeds to steer the conversation toward finding and exploring the client's own motivations for change. This involves three sets of skills for *recognizing, eliciting,* and *responding* to change talk. This is not to say that sustain talk is ignored or disrespected. When a client offers sustain talk, as happens naturally in ambivalence, the clinician listens to and often reflects it. It is interesting that sometimes when you reflect sustain talk, the client responds with the other side of ambivalence. Consider this actual exchange:

CLIENT: I really don't think alcohol is a problem for me.

INTERVIEWER: Drinking hasn't really caused you any problems.

CLIENT: Well, it does. Anybody who drinks as much as I do is bound to have some problems.

The MI clinician, however, is particularly interested in finding and exploring change talk and usually does not go looking for sustain talk (as one might do in a decisional balance intervention). This emphasis requires, first, being able to recognize change talk when you hear it and, second, realizing that, of all the things clients say to you, this is particularly important material because it predicts change.

Recognizing Change Talk

So, what is change talk? In the most general sense, it is anything clients say that signals a move toward or openness to change. You already know much about this just by virtue of being a member of society. When you ask someone to do something, you pay particularly close attention to what he or she says in response to your request because the person's words contain clues as to how likely it is to happen:

"I'll do it this afternoon."
"I'll try to do it."

"I might be able to."
"I would if I could."

Each culture has a natural language for transactions about change. The psycholinguist Paul Amrhein was particularly helpful in clarifying and specifying different kinds of change talk in MI (Amrhein, 1992; Amrhein, Miller, Yahne, Palmer, & Fulcher, 2003; Moyers et al., 2007).

Some kinds of change talk are termed *preparatory* in that they signal inclination toward change without committing to it. Four types of preparatory change talk are abbreviated in the acronym DARN: Desire, Ability, Reasons, and Need.

Every language on earth has a way of saying "I want" (Goddard & Wierzbicka, 1994). Desire statements imply an approach motivation: I want, like, wish, prefer, and the like.

"I *want* to feel less anxious."
"I would *like* to lose some weight."
"I *wish* I were more comfortable talking to people."

Ability statements imply the possibility of change:

"I know I *can* be kinder to my wife."
"I am *able* to resist temptation sometimes."
"I *could* just keep my mouth shut."

Reason statements have an if–then quality, expressing a desirable outcome if the change were made or an undesirable outcome without change.

"If I get arrested again I'll lose my job."
"My kids would be happy if I didn't criticize them so much."
"I should take my medication so I can concentrate at work."

Finally, Need statements have an imperative quality of must, have to, need to without necessarily stating a reason why:

"Something has got to change in our relationship."
"I have to get over this performance anxiety."
"I need to have a better relationship with my kids."

Other kinds of statements are called *mobilizing* change talk because they signal movement in the direction of change. An acronym here is CATs: Commitment, Activation, and Taking steps.

Commitment language is how we make promises and agreements. In a way, the strongest committing speech is also the simplest: I will. I do. I promise. There are also endless subtleties to signal greater or lesser degrees of willingness:

"I probably will."
"I promise, I guess."
"I guarantee that I will."

Then there are Activation statements that are not quite commitment but do signal willingness.

"I'll consider it."
"I'm willing to."
"I might."

Taking steps statements refer to something the person has already done to move toward change. This might occur when a client returns for the next session and says:

"I bought a pair of running shoes this week [with the goal of exercising more]."
"I filled the prescription you gave me."
"I did the diary that you asked me to keep."
"I went 2 days without smoking this week."

Change talk matters because it presages change. It literally is clients talking themselves into change (Miller & Rollnick, 2004). Some good news is that it is not the client's level of change talk and sustain talk at the beginning of a session that predicts change (or the lack thereof); rather, it is client speech toward the *end* of an MI session and the pattern over the course of the session (Amrhein et al., 2003). During a successful MI session the balance of change talk to sustain talk gradually shifts. In an experimental design, this balance rises and drops as the counselor shifts back and forth between MI and a more directive method (Glynn & Moyers, 2010).

Sustain talk is simply the opposite of change talk. It consists of statements that reflect an inclination toward the status quo and away from change. If the topic were whether to begin exposure-based treatment for posttraumatic stress disorder [PTSD], a client might say:

"I really don't *want* to do it!" [Desire]
"I *can't* do it." [Ability]
"It would bring up all of those memories for me again." [Reason]
"I don't *need* to do it." [Need]
"I'm not going to do it, period." [Commitment]
"I'm not ready." [Activation]
"I cancelled my appointment." [Taking steps]

With people who are ambivalent, it is normal to hear both change talk and sustain talk together, even in the same sentence and often with a "but" in the middle.

"I want to [change talk], but I don't think I can do it [sustain talk]."
"I'm not very happy about it [sustain talk], but I need to [change talk]."
"It's not what I want to do [sustain talk], it's what I'm going to do [change talk]."

The key to recognizing change talk is to tune your ear to hear it so that it stands out in your perception whenever it occurs.

Eliciting Change Talk

You don't have to wait for change talk to occur (though with ambivalent people you're likely to hear it regardless). There are evoking skills that invite clients to express change talk.

Perhaps the easiest and most common way to elicit change talk is to ask for it with an open question. This involves thinking one step ahead: If I ask this, what is the client likely to answer? Consider the expected answers to these open questions:

"What are some good reasons for you to make this change?" [Change talk]
"Why haven't you done it?" [Sustain talk]
"Knowing what you do about yourself, how might you be able to do it?" [Change talk]
"What do you like about how things are now?" [Sustain talk]

Ask open questions the answer to which is change talk.

Another evoking strategy involves looking ahead, asking clients

what could be the advantages of making the change and what might happen if they continue on their present course. Exploring hopes and values also can be useful.

"How would you like for your life to be different a year from now?"
"What is the worst that might happen if you keep on as you have been?"
"What do you care about most? How would you like to be remembered?"

A simple scaling question is to ask "On a scale from 0 to 10, where 0 is not at all important and 10 is the most important thing in your life right now, how important would you say it is for you to _____?" The client offers a number, perhaps a 4. Which would be the better follow-up question?

"And why are you at a 4 instead of 0 or 1?"
"And why are you at a 4 instead of a 6 or 7?"

The answer to the former is likely to be change talk, whereas the answer to the latter would probably be sustain talk.

These are just a few examples of ways to evoke change talk. There are hundreds of ways to do it, and you get immediate feedback from your client as to whether you're doing it well.

Responding to Change Talk

When you hear change talk, don't just sit there. If you respond in particular ways, you are likely to hear more change talk. For those four ways there is yet another acronym: EARS.

Actually EARS is just OARS with the first letter changed to an *E* because it is a specific type of open question—one that asks for *Elaboration* or an *Example*. If a client were to say "I think I would feel better if I exercised more," an *E* response could be:

"In what ways do you think you would feel better?"
"When have you felt good after exercising? Give me an example."
"How do you think exercising more might help you?"

All of these encourage the client to keep exploring the change talk theme that was just offered. Ask such questions with curiosity and a desire to understand better what the person means.

A again is for *Affirm*. You can offer a statement of appreciation or encouragement in response to change talk:

"Good for you!"
"That sounds like a good idea!"
"You really want to stay healthy."

Perhaps the most natural response to change talk is to *Reflect* it. This again encourages the person to keep exploring and elaborating on the change talk.

CLIENT: We just never talk. We don't communicate.

INTERVIEWER: You'd like to be communicating better. [Simple reflection]

CLIENT: Yes! Sometimes we go for hours at home without saying anything.

INTERVIEWER: That sounds kind of lonely. [Complex reflection]

CLIENT: Well, it is. I feel like he takes me for granted.

INTERVIEWER: And you would like to feel closer and cared for. [Complex reflection, continuing the paragraph]

CLIENT: Isn't that what a marriage is all about?

INTERVIEWER: It's really important to you, important enough that you're willing to work on it. [Trying out some additional change talk]

CLIENT: I am.

In general training on empathic listening, there is often little guidance about what to reflect out of all that a client says. In MI, it is particularly important to hear and reflect the client's change talk.

Similarly, although *Summarizing* is often taught as a basic counseling skill, there are usually few guidelines about what to include in a summary. In MI, one is first listening for and evoking change talk and reflecting it when it occurs. As change talk accumulates, the clinician offers summaries that pull it together. Each bit of change talk is like a flower, and the interviewer is assembling a bouquet. After hearing two or three flowers, offer back a small summary:

"So far, you've said that you would like to be communicating better in your relationship and you wish you would spend more time together doing fun things instead of just the routine. How else do you think you might strengthen your relationship?"

The open question invites more flowers, and as they come the bouquet grows larger. When you sense that you have collected all the change talk that is readily available, you can offer a recapitulation summary that pulls it all together. Thus, clients first hear themselves expressing change talk, then hear it again as you reflect it, and then hear it again in summaries alongside their other change talk. This is a path out of ambivalence, and one that is more difficult to do alone, when self-talk tends to vacillate between change talk and sustain talk that negate each other.

Planning

The fourth process in MI is planning, developing a specific plan for how to implement change or at least a first step. Clients often signal you that they are ready to begin the planning process by offering more mobilizing change talk and less sustain talk. You can test the water by offering a recapitulation summary of change talk and then asking a key question the essence of which is "So, what next?"

> "Given what you've said so far, what do you think you ought to do?"
> "So, what are you thinking at this point about how to proceed?"
> "If you do want to move in this direction, what might be a good first step for you?"

Perhaps the main point about planning in MI is that you are still evoking the plan from the client, drawing on the person's expertise. The MI style encourages a change plan that comes primarily from the client rather than the therapist. Switching into a directive mode at this point can undermine the motivational progress that has been made. As stated earlier, it is fine to offer some information or advice with permission, but beware of uninvited advice. What is the person ready, willing, and able to do? You may encourage the client to think about change with questions like "How do you think you can make that happen?" At times, clients may be motivated to change but not know what they need to do in order to accomplish the change (e.g., to reduce panic attacks). At such times, your own expertise is a useful and necessary part of therapy. The issue isn't whether or not advice and suggestions are offered but rather *how and when* they are offered. In MI, this input is given by a therapist who assumes the role of guide or change consultant. A guide doesn't decide when or where you should go but instead helps you get to where

you want to go. If the client wishes, you may make suggestions about various possible ways to proceed, with the attitude that the client will choose those options that fit best at present. For example, a therapist might say the following to a client who appears ready to change but doesn't know how to do it: "I have some thoughts about approaches that have been helpful for other people with a similar problem. Would you be interested in hearing them?" In this way, the therapist conveys respect for the clients' ability to choose what's best for them while being ready to provide input to facilitate change.

We should note that people often vacillate in their degree of motivation and ambivalence within and across sessions. As Mahoney (2001) suggested, change is best described as an oscillating process. It is seldom linear or unidimensional. Most people who seek therapy have more than one concern or are weighing change at various levels—for example, depression is often accompanied by relationship problems and substance abuse. There may be different degrees of motivation for change in these different problem areas. In addition, Arkowitz and Burke (2008) and Zuckoff, Swartz, and Grote (Chapter 6, this volume) distinguish between motivation to change the overall problem (e.g., anxiety) and motivation to engage in the actions necessary to accomplish the change. A person highly motivated to decrease distress may nevertheless be unwilling to pursue a particular strategy for doing so. There may be ambivalence about one or both of these.

It is normal for there to be multiple goals. More than half of those with a diagnosis of either an anxiety or depressive disorder meet the criteria for at least one additional anxiety or depressive disorder (Brown, Campbell, Lehman, Grisham, & Mancill, 2001). With substance use disorders as with many others, comorbidity seems to be the rule rather than the exception (Miller, Forcehimes, & Zweben, 2011). Clients may be at different stages of readiness for change in each problem area. A client might be highly motivated to work on his or her anxiety disorder but disinclined to change his or her substance use. Fortunately, therapeutic change in one problem area is often associated with improvement in other problem areas (Newman, Przeworski, Fisher, & Borkovec, 2010).

Resistance

In the first two editions of *Motivational Interviewing* (Miller & Rollnick, 1991, 2002) the concept of resistance was prominent. In fact, during the first decade or two a common motivation for clinicians to seek

MI training was the unanswered question "How can I deal with my most resistant and difficult clients?"

The third edition (Miller & Rollnick, 2013) signaled a significant shift away from the concept of resistance, which as noted earlier has somewhat pejorative overtones that imply it is a client problem. Two findings prompted this movement away from "resistance." The first was abundant evidence that the behavior termed "resistance" is highly responsive to therapist style. It can literally be dialed up or down by changes in therapist response (Glynn & Moyers, 2010; Patterson & Forgatch, 1985). It takes two to "resist." Secondly, it became clear that most of what had been described as resistance was merely *sustain talk*, a normal manifestation of ambivalence.

If one subtracts sustain talk from resistance, what is left? Miller and Rollnick (2013) termed it "discord," behavior that signals dissonance in the therapeutic relationship. Unlike sustain talk, which is about the change target, discord statements often contain the word "you":

"You don't understand how hard it is for me."
"You can't tell me what to do."
"I'm not sure if you can really help me."
"You're not listening to me."

Both sustain talk and discord are highly responsive to therapist style, and high levels of either predict a lack of change.

Both sustain talk and discord are important and warrant your notice and response. Our clinical experience, however, is that if you start with an MI style from the beginning you are unlikely to encounter much discord along the way. Sustain talk will still be there, of course, because it is normal with ambivalence, but as MI proceeds sustain talk tends to wane while change talk increases. Neither is sustain talk or discord necessarily a product of client pathology; both are clearly responsive to interpersonal dynamics.

Relationship of MI to Other Psychotherapies

MI is more of a "way of being" with people than it is another "school" of therapy (Rogers, 1980). Yet, as in other types of psychotherapy, the goal is to facilitate therapeutic change. In this section, we will compare and contrast MI with other psychotherapies and briefly discuss how MI can be used in conjunction with these other therapies.

While MI is strongly rooted in Carl Rogers's client-centered therapy, it also shares similarities with other therapeutic approaches. MI and psychoanalytic therapies view ambivalence or resistance as providing meaningful information that can be used productively in therapy. However, they differ sharply in the types of information that they consider important and how they respond to it. In psychoanalytic theories, resistance is usually thought of as conflict, mostly unconscious, between the client and therapist. A central construct in psychodynamic theories and therapies is transference, the unconscious tendency for the client to assign to the therapist feelings and attitudes associated with the client's early significant and problematic relationships, especially with parents, early in life. In this context, resistance provides clues to repressed conflicts that are carried over from the past, and re-enactment in therapy allows the therapist to help the client resolve the resistance and the early conflicts associated with it. By contrast, MI is almost entirely focused on the here and now, without *a priori* views about why ambivalence occurs. Ambivalence and discord are not seen as reflecting pathology. In MI, what is important is to understand the client's perspective and evoke his or her own motivations for change.

In cognitive-behavioral therapy (CBT) ambivalence is seldom discussed and is not given any special status, though some behavior therapists (e.g., Patterson & Forgatch, 1985) and cognitive-behavioral therapists (e.g., Leahy, 2002) have addressed resistance. A behavioral perspective attributes "resistance" to the therapist's inadequate conceptualization of the conditions that control the behaviors. Cognitive therapists (e.g., Beck, Rush, Shaw, & Emery, 1979) regard resistance as providing information about a client's distorted thinking and beliefs. For example, when a depressed client in cognitive therapy doesn't comply with homework assignments, cognitive therapists search for the beliefs and schemas that may be causing the resistance, such as pessimism about change.

In contrast to MI, CBT is a fairly didactic approach that emphasizes teaching clients new behaviors and ways to correct dysfunctional beliefs. CBT operates largely from a deficit model, implying that the client's problems emanate from something that is missing (e.g., skills, rational thinking, appropriate contingencies) that the therapist can teach. The use of the phrase "homework assignments" in CBT highlights the role of the therapist as more of a teacher in the change enterprise. The CBT therapist is regarded as an expert who can provide direction for the client in facilitating change. By contrast, MI involves more of an equal partnership than an expert–patient relationship.

MI has the potential for enhancing the effectiveness of CBT and other therapies. MI can provide a context for integrative therapy and the use of cognitive-behavioral methods (Arkowitz, 2002; Engle & Arkowitz, 2006; Miller, 1988). Strategies of both cognitive-behavioral and psychoanalytic therapies (such as structuring between-session activities in the former and giving interpretations in the latter) can be conducted in the context of a relationship that is more congruent with MI rather than in a manner that is more expert-driven. With the benefits of accurate empathy and evoking clients' own motivations for change, MI has the potential to enhance the efficacy of other active treatments.

How Effective Is MI?

How well does MI work, for what, and for whom? Across four decades a large body of research has accumulated to answer these questions. We summarize this literature here in three sections: (1) the efficacy of MI in clinical trials, (2) the relative efficacy of MI when compared with other approaches, and (3) studies of clinical effectiveness—how well the method holds up in community practice, outside the controlled conditions of clinical research. The MI website includes a cumulative bibliography of this literature (see *www.motivationalinterviewing.org*).

Efficacy Trials

Randomized clinical trials are often considered to be the gold standard in demonstrating treatment efficacy. In these studies participants agree to be randomly assigned to receive different treatments (such as MI or a comparison condition). Those in the comparison condition may receive no treatment, be placed on a waiting list, or receive treatment as usual or a different type of treatment. As we completed this chapter, more than 200 randomized clinical trials had been published for interventions identified with MI, along with many reviews and meta-analyses summarizing research findings (Britt, Hudson, & Blampied, 2004; Heckman, Egleston, & Hofmann, 2010; Hettema et al., 2005; Lundahl et al., 2013; Lundahl, Kunz, Brownell, Tollefson, & Burke, 2010; Rubak, Sandbaek, Lauritzen, & Christensen, 2005).

Several general conclusions may be drawn from this literature. There is strong evidence that MI can be effective in triggering behavior change, with average effect size generally in the small to medium range across a wide variety of target problems. Another clear pattern is

high variability in the efficacy of MI across studies, therapists, and sites within multisite trials, related in part to the quality or fidelity of MI that is delivered (Miller & Rollnick, 2014). The outcome literature ranges from null findings to large effect sizes, suggesting that other unidentified factors may mediate or moderate the efficacy of MI. As with many psychotherapies, the specific effect of MI tends to diminish with the length of follow-up. An interesting exception is that MI has continued to show a sizable effect (0.6) that holds up over time when MI is added to another active treatment (Hettema et al., 2005). MI and other treatment methods seem to have a synergistic effect. MI may increase the efficacy of other methods by enhancing adherence, and the efficacy of MI benefits from the additive effect of adhering to another active treatment. In many such studies MI was used as a pretreatment to another therapy. Some studies have found that the effectiveness of MI is greater with clients who have more severe problems (e.g., Handmaker, Miller, & Manicke, 1999; Westra, Arkowitz, & Dozois, 2009).

Relative Efficacy of MI

What happens when MI is compared directly with other treatment methods? Here, MI is not added to another approach, but instead clients are assigned at random to receive MI or a different treatment. Across studies, people receiving MI tend to show more change relative to those given advice or treated with educational, didactic, or persuasive interventions. When MI is compared with other active treatment approaches (such as CBT), outcomes tend to be similar, though the MI treatment usually involves fewer sessions (Babor & Del Boca, 2003; Hodgins, Currie, & el-Guebaly, 2001; Marijuana Treatment Project Research Group, 2004; UKATT Research Team, 2005).

Clinical Effectiveness

Published studies tend to show significant positive effects of MI on behavior change under the highly controlled conditions of a randomized clinical trial, though there are also noteworthy examples of null findings (e.g., Miller, Yahne, & Tonigan, 2003). Efficacy trials, however, do not guarantee effectiveness when MI is applied by frontline clinicians under ordinary conditions of community practice with diverse populations (Ball, Martino, et al., 2007). Nevertheless, many studies have demonstrated significant clinical benefits of MI when delivered by frontline providers for problems such as alcohol (e.g., Senft, Polen, Freeborn,

& Hollis, 1997) and drug abuse (e.g., Bernstein et al., 2005; Marijuana Treatment Project Research Group, 2004), hypertension (e.g., Woollard et al., 1995), smoking (e.g., Heckman et al., 2010), and health promotion (e.g., Resnicow et al., 2001; Thevos, Quick, & Yanduli, 2000).

Several aspects of the clinical trial literature are also encouraging in regard to generalizability. MI has shown efficacy across a wide range of target problems, populations, providers, and nations. U.S. studies of MI with ethnic minority populations have shown, on average, substantially *larger* effects than those with primarily white Anglo-American populations (Hettema et al., 2005). MI may offer advantages in cross-cultural counseling, particularly because of the therapist's focus on understanding the client's unique context and perspective. Furthermore, studies in which clinicians delivered manual-guided MI showed *smaller* effects than those observed when MI did not follow the constrained guidelines of a manual (Hettema et al., 2005). This finding is consistent with an emphasis on the overall approach or spirit of MI rather than on specific techniques, and overly prescriptive manuals run the risk of decreasing therapist flexibility in a way that disadvantages effective use of the method. In any event, across multiple trials these findings indicate that MI is applicable to a range of populations and problems and does not require the structure of a procedural manual and adherence monitoring. Nevertheless, adequate training is needed for clinicians to be able to deliver MI with sufficient fidelity to impact client outcomes (Miller & Rollnick, 2014).

Why Does MI Work?

When the effectiveness of a therapy varies across providers and programs, it suggests the need to understand the critical elements that contribute to its effects. One component of MI regarded by its codevelopers (Miller, 1983; Miller & Rollnick, 1991) as central to its efficacy is the therapist quality of *accurate empathy* (Rogers, 1959; Truax & Carkhuff, 1967). Sometimes misunderstood as having had similar life experiences, accurate empathy actually refers to a learnable clinical skill for identifying and reflecting the client's own experiencing. In research preceding the introduction of MI, therapist interpersonal skill in this domain predicted subsequent client change (Miller, Taylor, & West, 1980; Truax & Carkhuff, 1967; Valle, 1981).

As practiced within MI, accurate empathy blends with other interpersonal skill components to constitute an underlying MI spirit, assessed

by global ratings of clinician–client interactions (Baer et al., 2004; Miller & Mount, 2001; Moyers, Martin, Catley, Harris, & Ahluwalia, 2003; Moyers, Martin, Manuel, Hendrickson, & Miller, 2005). Observers' ratings of clinicians on this global scale predict more favorable client responses during an MI session (Moyers, Miller, & Hendrickson, 2005). Thus, one important component of the impact of MI appears to be the quality of the therapeutic relationship, reflected particularly in the skill of accurate empathy (Moyers & Miller, 2013).

Miller (1983) further hypothesized that MI would work by causing clients to verbalize their own arguments for change. Client ambivalence is resolved in the direction of change as clients express aloud the disadvantages of the status quo, the advantages of change, and their ability and intentions to change (Miller & Rollnick, 1991). Such client statements are now called change talk, and the strategic eliciting of client change talk differentiates MI from more general client-centered counseling (Miller & Rollnick, 2013). A wide range of studies has now confirmed a relationship between change talk expressed by clients during MI sessions and subsequent behavior change (Amrhein et al., 2003; Bertholet et al., 2010; Gaume et al., 2010; Hendrickson et al., 2004; Moyers et al., 2007, 2009).

In contrast, client speech that defends the status quo (sustain talk) predicts a lack of subsequent change (Amrhein et al., 2003; Miller, Benefield, & Tonigan, 1993). The more a client argues against change, the less likely it is to happen. This is not particularly surprising in itself ("Resistant clients don't change"). The implications for practice come from findings that client resistance is strongly influenced by the clinician's counseling style (Miller, Benefield, & Tonigan, 1993; Patterson & Forgatch, 1985). An important part of the impact of MI training may be to decrease counselors' countertherapeutic responses that evoke sustain talk and discord associated with poorer outcomes (White & Miller, 2007).

Much remains to be learned about the mechanisms underlying the efficacy of MI. Our current understanding of how MI works is this. If the clinician counsels in a way that elicits client defensiveness and sustain talk, change is unlikely to follow. If, on the other hand, the clinician provides accurate empathy and counsels in a way that evokes clients' own motivations for and commitment to change, then behavior change often follows.

A more complex question would be "Why or under what conditions does change talk lead to change?" Is change talk itself causal, or does it simply reflect some underlying process that leads to change? Simply

reading, writing, or chanting change talk seems unlikely to effect change. Neural activation patterns during spontaneous change talk are quite different from those with artificially induced change talk (Feldstein Ewing, Filbey, Sabbineni, Chandler, & Hutchinson, 2011).

Are there clients for whom MI is particularly indicated or contraindicated? Here the evidence base is thin, but a trend is apparent. The more resistant (oppositional, angry) a client, the greater seems to be the advantage of MI relative to more prescriptive approaches (Karno & Longabaugh, 2004, 2005; Project MATCH Research Group, 1997). MI was specifically developed for clients who are ambivalent and less ready to proceed with change. Conversely, MI has been found to be unhelpful for people who have already decided to change. Within the new four-process model of MI (Miller & Rollnick, 2013), it is the evoking process that is unnecessary if a client is already prepared for change, and the appropriate method (with adequate engaging) would be to proceed to planning. Continuing to use evoking with clients who are already highly motivated may damage therapeutic rapport or even lead to drop-out because therapist and client are not on the same page.

How Do Clinicians Learn MI?

Understanding how and why a treatment method works is helpful in knowing how to help clinicians learn it. This section focuses on what is known about how counselors learn the method of MI.

Eight Skills in Learning MI

Miller and Moyers (2006) have described eight skills by which clinicians acquire proficiency in MI. The first of these involves at least openness to the underlying assumptions and spirit of the method: a collaborative rather than prescriptive approach, eliciting motivation from the client rather than trying to install it, and honoring client autonomy rather than taking a more authoritarian or confrontational stance. Internalization of this overall spirit increases with practice, but one is unlikely to learn MI (or want to) without first being willing to entertain the feasibility of this approach. Learning MI is, in our experience, particularly difficult for those with a directive-expert perspective on the helping process. At the University of Arizona, Arkowitz has taught a semester-long MI practicum for students primarily trained in the directive style of cognitive-behavioral therapy. At first, MI seems to students like not doing anything useful. As their skill in MI progresses, however, the evidence

of client changes usually convinces them that they are indeed "doing" something therapeutic with MI.

A next task, and a challenging one in itself, is to develop proficiency in the interpersonal skills of client-centered counseling, particularly accurate empathy. A skillful clinician makes reflective listening look easy, but it is a proficiency that is developed and honed over years of practice. To take the next steps in MI, the clinician needs skill and comfort in forming accurate reflections that move the client forward, encouraging continued exploration.

MI differs from client-centered counseling in the focus of MI on ambivalence and in particular on change talk. A third skill in learning MI, then, is for the counselor to learn to recognize change talk when hearing it, and to distinguish it from other forms of client speech. Being able to recognize change talk, the clinician next learns how to elicit and reinforce it. In other words, the counselor employs specific strategies to evoke change talk and responds differentially in order to increase and strengthen it. This is linked to a fifth skill, learning how to respond to sustain talk and discord so as not to increase it.

The exploration of client ambivalence can continue almost indefinitely, and there is another skill in knowing when the client is ready to proceed to planning. Helping clients to formulate change plans represents a sixth skill in learning MI. Prematurely pursuing a change plan, however, can elicit pushback, increasing client commitment to the status quo. In MI, the change planning process continues to be one of collaborative negotiation. With a change plan developed, it remains to engage client commitment to the plan—a seventh task in acquiring MI skillfulness.

Finally, there is the skill of flexibly blending MI with other therapeutic methods. MI was never intended to be a comprehensive treatment, displacing all others. In fact, some of its most consistent beneficial effects are in combination with other forms of treatment. Some counselors with a high level of skill in MI sometimes have difficulty switching back and forth flexibly with other styles when needed (Miller, Moyers, Arciniega, Ernst, & Forcehimes, 2005). Others find a way to blend the clinical style of MI with other therapeutic approaches without a feeling of switching back and forth (Longabaugh et al., 2005).

Initial Training

From the above-described set of skills, it is apparent that there is only so much a practitioner could learn from a one-time workshop on MI. Even a 2- to 3-day initial workshop led by a proficient MI trainer is likely to provide primarily an introduction to the basic style and spirit of MI, first steps

toward learning reflective listening, and an ability to recognize change talk. A workshop is not the means but rather the *beginning* of learning MI. Some ambitious learning goals for an introductory workshop are:

1. To understand the underlying spirit and approach of MI.
2. To recognize reflective listening responses and differentiate them from other counseling responses.
3. To be able to provide at least 50% reflective listening responses during a conversation.
4. To recognize change talk and be able to differentiate commitment language from other types of change talk.
5. To list and demonstrate several different strategies for eliciting client change talk.

A workshop without follow-up, however, is unlikely to make a significant difference in practice. In an initial evaluation of Miller's own 2-day workshop, clinicians were able to demonstrate some skills on demand, but the changes in ongoing practice were minimal (Miller & Mount, 2001). More tellingly, there was no change in how clients responded to their therapists (e.g., change talk) after the workshop, suggesting no likely improvement in client outcomes.

What does seem to help in initially learning MI is a combination of ongoing feedback and coaching. This is sensible in that these two components—personal feedback and performance coaching—are helpful in learning most any complex skill. To yield a significant gain in clinical skill in MI, an introductory workshop should be followed by some ongoing individual feedback and coaching based on observation of actual practice with clients (Miller, Yahne, Moyers, Martinez, & Pirritano, 2004). Graduate training affords an opportunity for such ongoing shaping of clinical skillfulness. As mentioned earlier, the University of Arizona clinical psychology graduate program has offered a practicum on MI that involves lectures and discussion, demonstrations, roleplaying exercises, and ongoing supervision of clinical cases referred from the community. In a randomized trial of MI training strategies, therapists' clients showed increased change talk only when both feedback and coaching were provided after initial training (Amrhein, Miller, Yahne, Knupsky, & Hochstein, 2004).

Continuing to Learn

Excellent introductory training in MI, even with a few months of coaching support, still constitutes only an introduction to the clinical method.

(Imagine a 2-day workshop to learn psychoanalysis, tennis, piano, or chess.) The real learning is in doing, and that requires ongoing practice with feedback.

As it turns out, the needed feedback is built into the process of MI and depends upon knowing what to watch for. In response to a good reflective listening statement, the person keeps talking, reveals a bit more, explores a little further. The very process of reflective listening helps the counselor improve because clients continually provide immediate corrective feedback. In response to a reflection, a client basically says "Yes" or "No," "Yes, that's right," or "No, that's not quite what I meant," and in either case tends to continue the story and elaborate. This is the kind of feedback that permits learning, just as reliable as seeing where the golf ball goes after a swing.

Similarly, once one knows the sequence of client language in successful MI, there is immediate feedback as to how sessions are going. Counselor responses that lead to change talk are the "right stuff." In essence, client change talk becomes a reinforcer for counselor behavior. Counselors also learn what responses evoke sustain talk and discord. In essence, sustain talk or discord serves as an immediate signal not to repeat that response but to try another approach. In this way, clients become your teachers, offering ongoing information much as archers receive immediate feedback after each arrow shot in target practice.

There are other possible aids to continued learning of MI beyond the feedback provided by clients themselves. Computerized simulated encounters have been developed to which clinicians can generate responses and receive feedback (e.g., Baer et al., 2012). Recording and listening to one's own sessions can be helpful, particularly when using a structured coding system to focus on particular processes within MI sessions (Lane et al., 2005; Madson & Campbell, 2006; Pierson et al., 2007). Such session recordings can also be reviewed by a supervisor or coach whose task it is to help clinicians develop skill in MI. Some clinicians form peer learning groups to review session recordings together and discuss ongoing challenges in applying MI.

Conclusions

In its relatively brief life, MI has already had a significant impact on both research and practice for helping people change. A large evidence base has accumulated supporting the efficacy of MI in addressing a number of problematic health and lifestyle behaviors. Much has been learned about how to help practitioners develop proficiency in MI. A puzzling

phenomenon is the high variability in efficacy across studies, sites, and therapists, suggesting a need to understand better what factors influence the effectiveness or ineffectiveness of MI (Miller & Rollnick, 2014).

MI took root first in addiction treatment and medical health care. Applications of MI within mainstream mental health services, as reflected in this volume, is a newer enterprise. Studies continue to explore its utility with common clinical problems such as anxiety, depression, eating disorders, suicidality, and other issues that bring people to seek psychotherapy. MI has potential not only as a "stand-alone" treatment but perhaps more importantly as an approach that can be combined or integrated with other effective therapeutic methods. A meta-analysis of treatments (primarily CBT) for depression and some anxiety disorders by Westen and Morrison (2001) has revealed considerable efficacy, but with one-half to two-thirds of clients showing significant improvement. However, there is considerable room for improvement in treatment retention, reduction of problem severity, and prevention of recurrences. Using MI as a pretreatment for CBT (e.g., Westra, Arkowitz, & Dozois, 2009) or delivering other evidence-based treatments such as CBT in the "MI spirit" (Arkowitz & Burke, 2008; Miller, 2004) both have the potential to improve upon these results.

Some promising starts have been made to understand how and why MI facilitates change. Therapist empathy, client change talk, and diminished "resistance" all seem to play a role in the efficacy of MI, but still we are just getting started in understanding the specific and relational elements that yield change (Miller & Rose, 2009). Research on the critical elements and processes within MI will continue to inform practice, quality assurance, and training of MI. Look how far we've come! How can we still have so far to go?

References

Amrhein, P. C. (1992). The comprehension of quasi-performance verbs in verbal commitments: New evidence for componential theories of lexical meaning. *Journal of Memory and Language, 31*, 756–784.

Amrhein, P. C., Miller, W. R., Yahne, C., Knupsky, A., & Hochstein, D. (2004). Strength of client commitment language improves with therapist training in motivational interviewing. *Alcoholism: Clinical and Experimental Research, 28*(5), 74A.

Amrhein, P. C., Miller, W. R., Yahne, C. E., Palmer, M., & Fulcher, L. (2003). Client commitment language during motivational interviewing predicts drug use outcomes. *Journal of Consulting and Clinical Psychology, 71*, 862–878.

Arkowitz, H. (2002). An integrative approach to psychotherapy based on common processes of change. In J. Lebow (Ed.), *Comprehensive handbook of psychotherapy: Vol, 4. Integrative and eclectic therapies* (pp. 317–337). New York: Wiley.

Arkowitz, H., & Burke, B. (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. 145–173). New York: Guilford Press.

Babor, T. F., & Del Boca, F. K. (Eds.). (2003). *Treatment matching in alcoholism*. Cambridge, UK: Cambridge University Press.

Baer, J. S., Carpenter, K. M., Beadnell, B., Stoner, S. A., Ingalsbe, M. H., Hartzler, B., et al. (2012). Computer assessment of simulated patient interviews (CASPI): Psychometric properties of a web-based system for the assessment of motivational interviewing skills. *Journal of Studies on Alcohol and Drugs, 73*(1), 154–164.

Baer, J. S., Rosengren, D. B., Dunn, C. W., Wells, W. A., Ogle, R. L., & Hartzler, B. (2004). An evaluation of workshop training in motivational interviewing for addiction and mental health clinicians. *Drug and Alcohol Dependence, 73*(1), 99–106.

Ball, S. A., Martino, S., Nich, C., Frankforter, T. L., van Horn, D., Crits-Christoph, P., et al. (2007). Site matters: Multisite randomized trial of motivational enhancement therapy in community drug abuse clinics. *Journal of Consulting and Clinical Psychology, 75*, 556–567.

Ball, S. A., Todd, M., Tennen, H., Armeli, S., Mohr, C., Affleck, G., et al. (2007). Brief motivational enhancement and coping skills interventions for heavy drinking. *Addictive Behaviors, 32*, 1105–1118.

Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression*. New York: Guilford Press.

Bem, D. J. (1967). Self-perception: An alternative interpretation of cognitive dissonance phenomena. *Psychological Review, 74*, 183–200.

Bernstein, J., Bernstein, E., Tassiopoulos, K., Heeren, T., Levenson, S., & Hingson, R. (2005). Brief motivational intervention at a clinic visit reduces cocaine and heroin use. *Drug and Alcohol Dependence, 77*, 49–59.

Bertholet, N., Faouzi, M., Gmel, G., Gaume, J., & Daeppen, J. B. (2010). Change talk sequence during brief motivational intervention, towards or away from drinking. *Addiction, 105*, 2106–2112.

Brehm, S. S., & Brehm, J. W. (1981). *Psychological reactance: A theory of freedom and control*. New York: Academic Press.

Britt, E., Hudson, S. M., & Blampied, N. M. (2004). Motivational Interviewing in health settings: A review. *Patient Education and Counseling, 53*(2), 147–155.

Brown, T. A., Campbell, L. A., Lehman, C. L., Grisham, J. R., & Mancill, R. B. (2001). Current and lifetime comorbidity of the *DSM-IV* anxiety and mood disorders in a large clinical sample. *Journal of Abnormal Psychology, 110*, 585–599.

Cofer, C. N., & Apley, M. H. (1964). *Motivation*. New York: Wiley.

Daeppen, J-B., Bertholet, N., Gmel, G., & Gaume, J. (2007). Communication

during brief intervention, intention to change, and outcome. *Substance Abuse, 28*(3), 43–51.

Engle, D., & Arkowitz, H. (2006). *Ambivalence in psychotherapy: Facilitating readiness to change*. New York: Guilford Press.

Feldstein Ewing, S. W., Filbey, F. M., Sabbineni, A., Chandler, L. D., & Hutchinson, K. E. (2011). How psychological alcohol interventions work: A preliminary look at what fMRI can tell us. *Alcoholism: Clinical and Experimental Research, 35*(4), 643–651.

Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.

Gaume, J., Bertholet, N., Faouzi, M., Gmel, G., & Daeppen, J. B. (2010). Counselor motivational interviewing skills and young adult change talk articulation during brief motivational interventions. *Journal of Substance Abuse Treatment, 39*, 272–281.

Glynn, L. H., & Moyers, T. B. (2010). Chasing change talk: The clinician's role in evoking client language about change. *Journal of Substance Abuse Treatment, 39*, 65–70.

Goddard, C., & Wierzbicka, A. (1994). *Semantic and lexical universals*. Amsterdam: John Benjamins.

Handmaker, N. S., Miller, W. R., & Manicke, M. (1999). Findings of a pilot study of motivational interviewing with pregnant drinkers. *Journal of Studies on Alcohol, 60*, 285–287.

Heckman, C. J., Egleston, B. L., & Hofmann, M. T. (2010). Efficacy of motivational interviewing for smoking cessation: A systematic review and meta-analysis. *Tobacco Control, 19*(5), 410–416.

Hendrickson, S. M. L., Martin, T., Manuel, J. K., Christopher, P. J., Thiedeman, T., & Moyers, T. B. (2004). Assessing reliability of the Motivational Interviewing Treatment Integrity Behavioral Coding System under limited range. *Alcoholism: Clinical and Experimental Research, 28*(5), 74A.

Hettema, J., Steele, J., & Miller, W. R. (2005). Motivational interviewing. *Annual Review of Clinical Psychology, 1*, 91–111.

Hodgins, D. C., Currie, S. R., & el-Guebaly, N. (2001). Motivational enhancement and self-help treatments for problem gambling. *Journal of Consulting and Clinical Psychology, 69*, 50–57.

Karno, M. P., & Longabaugh, R. (2004). What do we know?: Process analysis and the search for a better understanding of Project MATCH's anger-by-treatment matching effect. *Journal of Studies on Alcohol, 65*, 501–512.

Karno, M. P., & Longabaugh, R. (2005). An examination of how therapist directiveness interacts with patient anger and reactance to predict alcohol use. *Journal of Studies on Alcohol, 66*, 825–832.

Lane, C., Huws-Thomas, M., Hood, K., Rollnick, S., Edwards, K., & Robling, M. (2005). Measuring adaptations of motivational interviewing: The development and validation of the behavior change counseling index (BECCI). *Patient Education and Counseling, 56*, 166–173.

Leahy, R. L. (2002). *Overcoming resistance in cognitive therapy*. New York: Guilford Press.

Lewin, K. (1935). *A dynamic theory of personality*. New York: McGraw-Hill.

Longabaugh, R., Zweben, A., LoCastro, J. S., & Miller, W. R. (2005). Origins, issues and options in the development of the Combined Behavioral Intervention. *Journal of Studies on Alcohol, 66*(4), S179–S187.

Lundahl, B., Moleni, T., Burke, B. L., Butters, R., Tollefson, D., Butler, C., et al. (2013). Motivational interviewing in medical care settings: A systematic review and meta-analysis of randomized controlled trials. *Patient Education and Counseling, 93*(2), 157–168.

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*(2), 137–160.

Madson, M. B., & Campbell, T. C. (2006). Measures of fidelity in motivational enhancement: A systematic review. *Journal of Substance Abuse Treatment, 31*, 67–73.

Mahoney, M. J. (2001). *Human change processes*. New York: Basic Books.

Marijuana Treatment Project Research Group. (2004). Brief treatments for cannabis dependence: Findings from a randomized multisite trial. *Journal of Consulting and Clinical Psychology, 72*, 455–466.

Miller, W. R. (1983). Motivational interviewing with problem drinkers. *Behavioural Psychotherapy, 11*, 147–172.

Miller, W. R. (1985). Motivation for treatment: A review with special emphasis on alcoholism. *Psychological Bulletin, 98*, 84–107.

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* (43–55). Newbury Park, CA: Sage.

Miller, W. R. (Ed.) (2004). *Combined Behavioral Intervention manual: A clinical research guide for therapists treating people with alcohol abuse and dependence* (COMBINE Monograph Series, Vol. 1). Bethesda, MD: National Institute on Alcohol Abuse and Alcoholism.

Miller, W. R., Benefield, R. G., & Tonigan, J. S. (1993). Enhancing motivation for change in problem drinking: A controlled comparison of two therapist styles. *Journal of Consulting and Clinical Psychology, 61*, 455–461.

Miller, W. R., Forcehimes, A. A., & Zweben, A. (2011). *Treating addiction: Guidelines for professionals*. New York: Guilford Press.

Miller, W. R., & Mount, K. A. (2001). A small study of training in motivational interviewing: Does one workshop change clinician and client behavior? *Behavioural and Cognitive Psychotherapy, 29*, 457–471.

Miller, W. R., & Moyers, T. B. (2006). Eight stages in learning motivational interviewing. *Journal of Teaching in the Addictions, 5*, 3–17.

Miller, W. R., Moyers, T. B., Arciniega, L. T., Ernst, D., & Forcehimes, A. (2005). Training, supervision and quality monitoring of the COMBINE study behavioral interventions. *Journal of Studies on Alcohol* (Suppl. 15), S188–S195.

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* (2nd ed.). New York: Guilford Press.

Miller, W. R., & Rollnick, S. (2004). Talking oneself into change: Motivational

interviewing, stages of change, and the therapeutic process. *Journal of Cognitive Psychotherapy, 18*, 299–308.

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

Miller, W. R., & Rollnick, S. (2014). The effectiveness and ineffectiveness of complex behavioral interventions: Impact of treatment fidelity. *Contemporary Clinical Trials, 37*(2), 234–241.

Miller, W. R., & Rose, G. S. (2009). Toward a theory of motivational interviewing. *American Psychologist, 64*, 527–537.

Miller, W. R., & Rose, G. S. (2015). Motivational interviewing and decisional balance: Contrasting procedures to client ambivalence. *Behavioural and Cognitive Psychotherapy, 43*(2), 129–141.

Miller, W. R., Sovereign, R. G., & Krege, B. (1988). Motivational interviewing with problem drinkers: II. The Drinker's Check-up as a preventive intervention. *Behavioural Psychotherapy, 16*, 251–268.

Miller, W. R., Taylor, C. A., & West, J. C. (1980). Focused versus broad spectrum behavior therapy for problem drinkers. *Journal of Consulting and Clinical Psychology, 48*, 590–601.

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 Consulting and Clinical Psychology, 72*, 1050–1062.

Miller, W. R., Yahne, C. E., & Tonigan, J. S. (2003). Motivational interviewing in drug abuse services: A randomized trial. *Journal of Consulting and Clinical Psychology, 71*, 754–763.

Miller, W. R., Zweben, A., Diclemente, C. C., & Rychtarik, R. G. (1992). *Motivational enhancement therapy manual: A clinical research guide for therapists treating individuals with alcohol abuse and dependence* (Vol. 2). Rockville, MD: National Institute on Alcohol Abuse and Alcoholism.

Moyers, T. B., & Martin, T. (2006). Therapist influence on client language during motivational interviewing sessions. *Journal of Substance Abuse Treatment, 30*, 245–252.

Moyers, T. B., Martin, T., Catley, D., Harris, K. J., & Ahluwalia, J. S. (2003). Assessing the integrity of motivational interventions: Reliability of the Motivational Interviewing Skills Code. *Behavioural and Cognitive Psychotherapy, 31*, 177–184.

Moyers, T. B., Martin, T., Christopher, P. J., Houck, J. M., Tonigan, J. S., & Amrhein, P. C. (2007). Client language as a mediator of motivational interviewing efficacy: Where is the evidence? *Alcoholism: Clinical and Experimental Research, 31*(Suppl.), 40S–47S.

Moyers, T. B., Martin, T., Houck, J. M., Christopher, P. J., & Tonigan, J. S. (2009). From in-session behaviors to drinking outcomes: A causal chain for motivational interviewing. *Journal of Consulting and Clinical Psychology, 77*(6), 1113–1124.

Moyers, T. B., Martin, T., Manuel, J. K., Hendrickson, S. M. L., & Miller, W. R. (2005). Assessing competence in the use of motivational interviewing. *Journal of Substance Abuse Treatment, 28*, 19–26.

Moyers, T. B., & Miller, W. R. (2013). Is low therapist empathy toxic? *Psychology of Addictive Behaviors, 27*(3), 878–884.

Moyers, T. B., Miller, W. R., & Hendrickson, S. M. L. (2005). How does motivational interviewing work? Therapist interpersonal skill predicts involvement within motivational interviewing sessions. *Journal of Consulting and Clinical Psychology, 73,* 590–598.

Myers, D. G. (2011). *Psychology* (10th ed.). New York: Worth Publishers.

Newman, M. G., Przeworski, A., Fisher, A. J., & Borkovec, T. D. (2010). Diagnostic comorbidity in adults with generalized anxiety disorder: Impact of comorbidity on psychotherapy outcome and impact of psychotherapy on comorbid diagnoses. *Behavior Therapy, 41*, 59–72.

Patterson, G., & Chamberlain, P. (1994). A functional analysis of resistance during parent training. *Clinical Psychology: Research and Practice, 1*, 53–70.

Patterson, G. R., & Forgatch, M. S. (1985). Therapist behavior as a determinant for client noncompliance: A paradox for the behavior modifier. *Journal of Consulting and Clinical Psychology, 53*, 846–851.

Pierson, H. M., Hayes, S. C., Gifford, E. V., Roget, N., Padilla, M., Bissett, R., et al. (2007). An examination of the Motivational Interviewing Treatment Integrity code. *Journal of Substance Abuse Treatment, 32*, 11–17.

Petri, H. L., & Govern, J. M. (2012). *Motivation: Theory, research and application*. Belmont, CA: Wadsworth.

Prochaska, J. O. (1994). Strong and weak principles for progressing from precontemplation to action on the basis of twelve problem behaviors. *Health Psychology, 13*, 47–51.

Prochaska, J., & Norcross, J. (2013). *Systems of psychotherapy: A transtheoretical analysis* (8th ed.). Stamford, CT: Cenage Learning.

Project MATCH Research Group (1997). Project MATCH secondary a priori hypotheses. *Addiction, 92,* 1671–1698.

Resnicow, K., Jackson, A., Wang, T., De, A. K., McCarty, F., Dudley, W. N., et al. (2001). A motivational interviewing intervention to increase fruit and vegetable intake through Black churches: Results of the Eat for Life trial. *American Journal of Public Health, 91*(10), 1686–1693.

Rogers, C. R. (1951). *Client-centered therapy*. Boston: Houghton Mifflin.

Rogers, C. R. (1959). A theory of therapy, personality, and interpersonal relationships as developed in the client-centered framework. In S. Koch (Ed.), *Psychology: The study of a science: Vol. 3. Formulations of the person and the social contexts* (pp. 184–256). New York: McGraw-Hill.

Rogers, C. R. (1980). *A way of being*. Boston: Houghton Mifflin.

Rollnick, S., & Miller, W. R. (1995). What is motivational interviewing? *Behavioural and Cognitive Psychotherapy, 23*, 325–334.

Rollnick, S., Miller, W. R., & Butler, C. (2008). *Motivational interviewing in health care*. New York: Guilford Press.

Rubak, S., Sandbaek, A., Lauritzen, T., & Christensen, B. (2005). Motivational interviewing: A systematic review and meta-analysis. *British Journal of General Practice, 55*, 305–312.

Senft, R. A., Polen, M. R., Freeborn, D. K., & Hollis, J. F. (1997). Brief

intervention in a primary care setting for hazardous drinkers. *American Journal of Preventive Medicine, 13*, 464–470.

Stephens, R. S., Babor, T. F., Kadden, R., & Miller, M. (2002). The Marijuana Treatment Project: Rationale, design and participant characteristics. *Addiction, 97*, 109–124.

Thevos, A. K., Quick, R. E., & Yanduli, V. (2000). Application of motivational interviewing to the adoption of water disinfection practices in Zambia. *Health Promotion International, 15*, 207–214.

Truax, C. B., & Carkhuff, R. R. (1967). *Toward effective counseling and psychotherapy*. Chicago: Aldine.

UKATT Research Team. (2005). Effectiveness of treatment for alcohol problems: Findings of the randomized UK Alcohol Treatment Trial (UKATT). *British Medical Journal, 331*, 541–544.

Valle, S. K. (1981). Interpersonal functioning of alcoholism counselors and treatment outcome. *Journal of Studies on Alcohol, 42*, 783–790.

Westen, D., & Morrison, K. (2001). A multi-dimensional meta-analysis of treatments for depression, panic, and generalized anxiety disorder: An empirical examination of the status of empirically supported therapies. *Journal of Consulting and Clinical Psychology, 69*, 875–899.

Westra, H. A., Arkowitz, H., & Dozois, D. J. A. (2009). Adding a motivational interviewing pretreatment to cognitive behavioral therapy for generalized anxiety disorder: A randomized controlled trial. *Journal of the Anxiety Disorders, 23*, 1106–1117.

White, W. L., & Miller, W. R. (2007). The use of confrontation in addiction treatment: History, science, and time for a change. *The Counselor, 8*(4), 12–30.

Woollard, J., Beilin, L., Lord, T., Puddey, I., MacAdam, D., & Rouse, I. (1995). A controlled trial of nurse counselling on lifestyle change for hypertensives treated in general practice: Preliminary results. *Clinical and Experimental Pharmacology and Physiology, 22*, 466–468.