Incorporating Motivational Interviewing Into Behavioral Obesity Treatment

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Motivational interviewing may be an appealing addition to a comprehensive behavioral weight loss program. Behavioral strategies have been shown effective in achieving modest weight reduction; however, not all individuals are successful at initial weight loss and many struggle with continued weight maintenance. Theory-based strategies that may enhance overall treatment efficacy or facilitate behavior change for specific clients are needed. Motivational interviewing has been demonstrated effective in facilitating behavior change in addictive disorders, and preliminary applications as an adjunct to obesity treatments are promising. The article presents fundamentals of motivational interviewing and specific examples of applications within a behavioral weight control program.

LONG-TERM WEIGHT MANAGEMENT can be challenging. Weight loss can be difficult to achieve and weight maintenance even more elusive. Behavioral weight loss programs have been found effective in achieving only modest weight reductions among mild to moderately obese individuals (Jeffery et al., 2000). Strategies to enhance the efficacy of traditional weight loss programs offer promise in improving long-term outcomes. For instance, physical activity and relapse prevention are now considered essential components of a comprehensive behavioral weight loss program because they improve weight loss outcomes (Perri, Shapiro, Ludwig, Twentyman, & McAdoo, 1984; Pronk & Wing, 1994). However, the search for additional methods to enhance weight loss continues.

One method that has been suggested as a potentially effective adjunct to a comprehensive behavioral weight loss program is motivational interviewing (MI). Research has demonstrated that MI is effective in the treatment of addictive disorders (Bien, Miller, & Borough, 1993; Miller, Benefield, & Tonigan, 1993; Miller & Rollnick, 1991) and improved outcome appears to be mediated by increased adherence to treatment (Brown & Miller, 1993). MI techniques may also be helpful in weight loss. Preliminary data indicate that the addition of MI to a behavioral weight control program for women with Type 2 diabetes enhanced both program participation and glycemic control posttreatment (Smith, Heckemeyer, Kratt, & Mason, 1997), with strong suggestions of increased weight losses among individuals receiving MI.

MI may be an appealing addition to cognitive behavioral weight loss programs for several reasons. Consistent with other significant behavior change processes, ambivalence is inherent in the process of losing weight. The waxing and waning course of weight loss, the strong potential that overweight clients have a history of prior weight loss failures, and the large number of complex behavioral changes required in weight reduction programs may set the stage for significant ambivalence for some or all of the required changes. MI seeks to move clients into action by identifying discrepancies between their current behavior and desired goals, acknowledging ambivalence rather than ignoring it or forcing premature resolution.

MI also complements traditional behavioral weight loss programs by tailoring treatment to client-specific goals. Individual tailoring has been shown to increase effectiveness of other behavioral change programs, such as smoking cessation and reducing dietary fat (Kreuter, Strecher, & Glassman, 1999; Skinner, Campbell, Rimer, Curry, & Prochaska, 1999). By focusing on personal concerns rather than generalized treatment goals, clients may feel a greater sense of control and greater satisfaction with treatment outcome. Given the emphasis on individualized tailoring, MI is likely to be most effective when delivered in individual sessions coupled with a comprehensive weight loss program, rather than as a component of group treatment. Thus, although empirical data evaluating the long-term efficacy of MI in conjunction with behavioral obesity treatment are not yet available, early suggestions are promising (Smith et al., 1997).

What Is MI?

MI was initially developed by Miller and Rollnick (1991) to help problem drinkers become more engaged in available treatments. MI strives to enhance self-efficacy and personal control for behavior change and uses an interactive, empathic listening style to increase motivation by highlighting the discrepancy between personal goals and current behavior. The juxtaposition of personal goals with current behavior provides a salient mirror for the

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individual, which is more likely to prompt action than is counseling based primarily on skill acquisition, particularly among individuals contemplating behavior change or ambivalent about change.

MI provides clients with a forum to give voice to both the perceived advantages and the "not-so-good things" about potential behavior change. MI therapists go a step beyond giving permission to express ambivalence—they actively elicit articulation of both sides of the argument for behavior change by the client. Individuals come to know their motivations by hearing themselves state reasons for change aloud, sometimes expressing reasons for change of which they had not previously been aware. It is therefore more powerful for clients to hear themselves, rather than a therapist, articulate the potential benefits of change. Reflective listening and summarizing allows this discovery and clarification. Because MI emphasizes the expression of reasons to change by the client, the proportion of time spent speaking during any given session should be greater for the client than for the therapist, with a preponderance of reflective statements from the therapist.

A second feature of MI is its approach to resistance. Whereas some therapeutic styles address resistance as issues to be confronted, problems to be solved, or an "unmotivated client," MI approaches resistance, or heightened ambivalence, as a natural part of therapeutic process. By "rolling with resistance" rather than attacking it, MI creates a forum for further elucidation of reasons to change and "not-so-good" aspects of change, as well as further exploration of current status versus desired goals. MI views resistance as an opportunity to enhance motivation and promote behavior change.

Although these components of MI are not exhaustive, they represent the spirit of the approach. The following sections provide discussion and illustration of specific strategies utilized in MI with individuals in a behavioral weight control program. The specific strategies to be discussed include eliciting self-motivational statements, reflection, the use of objective data, and negotiating a plan for change.

Elicitation of Self-Motivational Statements

Elicitation of self-motivational statements—or arguments in favor of making a behavior change—is a key component of MI. The primary goal in eliciting self-motivational statements is to have the client, rather than the therapist, delineate reasons for change, using personally meaningful terms and subjectively relevant outcomes. Rather than trying to convince or persuade the client of reasons to change, the therapist facilitates the client's expression of motivational statements. When the client him- or herself considers and presents personally relevant arguments for change, the eventual effect may be greater than if the therapist presents a litany of reasons for the client to change.

Miller and Rollnick (1991) describe four general categories of self-motivational statements: (a) recognition of the problem; (b) concern about the problem; (c) intention to change; and (d) optimism about change. In the context of a behavioral weight loss program, problem recognition may be less relevant than subsequent categories. Most individuals voluntarily enter weight loss programs, realizing that their weight is a problem. Examples of self-motivational statements are listed in Table 1. A number of strategies can be used to effectively elicit self-motivational statements. The strategies listed below are not comprehensive, but offer a general overview of useful techniques.

Questions with elaboration. The most direct way to elicit self-motivational statements is with open-ended questions to explore how weight is a concern, followed by a series of open-ended questions and reflections to clarify and specify concerns.

- "What would you say is your most pressing concern right now?"
- "What difficulty have you had with your weight (or weight-related health concerns)?"
- "You mentioned you're concerned about your health. What in particular worries you?"
- "So you're concerned about your blood pressure, particularly because it increases your chance of

Table 1
Types of Self-Motivational Statements

Type of Statement	Example
Problem recognition	"I found out I have diabetes—now I know my weight can kill me!"
	"I feel bad and have no self-confidence since I gained weight."
	"I'm so big my children are embarrassed to be seen with me—even I'm embarrassed by my weight."
Concern	"I just used to have more energy."
	"It would sure make my golf game easier."
	"I'm tired of shopping in the plus-size stores."
Intention to change	"I really need to do something about my weight."
	"I really want to eat better so I set a good example for my kids."
	"I've tried to start to exercise but it's hard to find the time."
Optimism about change	"I may be able to stop my diabetes pills if I lost some weight."
	"Well, I've lost weight before and felt better about myself."
	"My sister started a diet and exercise program and already has lost 10 pounds, so we're going to work together."

having a stroke. How do you see your weight fitting into this concern?"
- "How has your weight gotten in the way of the things you like to do on a daily basis?"

Previous experience with weight loss. Another strategy for eliciting self-motivational statements is to inquire about the client's previous experience with weight loss. Exploring how *this* attempt differs from previous attempts or how current reasons for weight loss contrast with previous reasons can be an effective way to elicit statements concerning intention to change.

- "You've had lots of previous attempts to lose weight—what makes this time different?"
- "So, there was a period of time after your daughter was born when you lost a significant amount of weight. What prompted you to lose weight at that point?"

Rating motivation. Self-motivational statements may also be elicited by having clients rate current level of motivation for weight loss. The therapist can then ask what makes the client so motivated (no matter how low the motivation rating!) rather than what it would take to be more motivated. The latter probe is saved for after the initial elicitation of self-motivational statements.

"On a scale from 1 to 10, with 10 being the most motivated you could possibly be, and 1 being not at all motivated, where would you place yourself? . . . So you'd say you're a 5. What makes you a 5 rather than a 3 or a 4?"

Looking forward. Having clients envision how things would be if they were successful in making the proposed changes frequently elicits motivational statements. It can also be helpful for individuals to imagine how things may turn out if the status quo is maintained.

- "If you were as successful in this program as you'd like to be, how do you see things looking different in a year from now?"
- "How do you imagine things playing out if you continue just as you are now?"
- "What do you imagine as the best possible outcome from participating in this program?"
- "How would your day-to-day life be different if you were successful in losing weight?"

Using current progress. Clients can often lose momentum as they begin to realize how far they still have to go to accomplish their goals. As some of the initial, reinforcing aspects of successful weight loss begin to diminish, personal review of progress can offer an effective revitalization of motivation. Highlighting progress and contrasting current behavior with previous status are both effective in eliciting self-motivational statements.

- "You mentioned that you've been really busy and stressed. How have you managed to keep up with your physical activity?"
- "So you seem to have hit a plateau—you haven't lost any weight for two weeks now and you're feeling frustrated. What keeps you from throwing in the towel altogether?"
- "Although you know that you've got a long road ahead of you, you have already been exercising regularly, writing down your foods, and limiting your sweets. How is this different from when you first started your weight loss efforts?"

Reflection

After eliciting self-motivational statements, it is important to follow up with reflective summary statements. In addition to communicating empathy and accurate understanding, reflective statements allow the client to hear personally relevant reasons for wanting to change reflected in his or her own words. Furthermore, accurate reflective statements often prompt further elaboration and additional self-motivational statements. Detailed summaries increase the likelihood that reasons for change beyond the superficial will be expressed. For example, contrast commonly given reasons for weight loss—"to look better" and "to feel better and improve my health"—with the following:

- "It's not so much your health that concerns you right now. Sure, you'd like your cholesterol to be in the normal range, but generally you're feeling good. What's really an issue for you is how you look. Your appearance is something that has always been important to you, and you notice that as you've gained weight, your self-confidence has taken a hit. You don't like the way you look in your clothes, and you don't like the comments that your family makes about your weight. You really feel that if you're able to lose some weight, you will start to get some of that confidence back, and that will make a big difference in how you feel overall."
- "One of the biggest things that concerns you about your weight is your level of energy. Since you've gained weight, you notice that you don't have as much fun playing golf with your friends because you get tired and can't breathe. You're also so exhausted at the end of the day that you find yourself falling asleep watching TV rather than spending time with your wife. Perhaps worst of all, you've noticed that you just don't have the energy to play with your grandchildren anymore, and that leaves you feeling very sad and guilty."

Using Objective Feedback

Providing clients with assessment results or objective feedback in a structured format is an integral element of MI. In addition to weight, many comprehensive behavioral weight loss programs assess parameters such as cholesterol, triglycerides, and blood pressure. Furthermore, programs designed for particular populations such as diabetics may include other measures such as glycemic control. All these data lend themselves to feedback within an MI format. Other data relevant to overweight individuals include mood, pain ratings, sleep quality, and energy level. The goal of presenting such data is to build or strengthen motivation for change by setting up a discrepancy between where clients are and where they want to be in terms of these parameters.

For maximum effectiveness, presentation of data should be as personalized as possible, including both the individual's data and normative or recommended levels to place personal data in context. Care must be taken not to assume that the most "alarming" or out-of-range data represent the client's greatest concern. Data are presented in a structured format using a nonjudgmental, matter-of-fact style. Interpretation or extrapolation of data to "scare" clients into being motivated or threaten them with health consequences is *not* within the spirit of MI. The interviewer asks the client what he or she thinks of the data and whether there are questions about the results; this often prompts specific questions about degree of risk or ways to reduce risk.

> "Well, I've just presented you with a lot of information. What do you make of all this? How does all of this strike you?"

It may be particularly helpful to present data visually rather than as a list of laboratory values accompanied by normal ranges. For example, a bar graph can provide a concise and powerful summary of data across a series of visits (Figure 1).

When clients are dissatisfied with objective feedback. When clients express concern or dissatisfaction with objective data, it is beneficial to provide an opportunity for him or her to articulate the specific, personally salient concerns. This strategy offers a forum in which self-motivational statements can be readily elicited. It may be helpful to inquire about which results most concern the client and how these concerns relate to weight management.

> THERAPIST: What concerns you most about what I've reviewed with you?
>
> CLIENT: Well, I'd have to say my cholesterol. It's really up there, and I sure don't want to have a heart attack like my father!
>
> THERAPIST: So, while there are a number of things that concern you about your health, cholesterol is a particular worry. You've seen firsthand the effects of heart disease and want to do what you can to avoid that.
>
> CLIENT: Yes, definitely, that cholesterol level is really concerning.
>
> THERAPIST: How do you see your concerns about your cholesterol and potential heart disease fitting in with your weight loss efforts?

If a client expresses dissatisfaction with objective feedback presented after the weight loss treatment has begun, the MI therapist can use a variety of strategies to high-

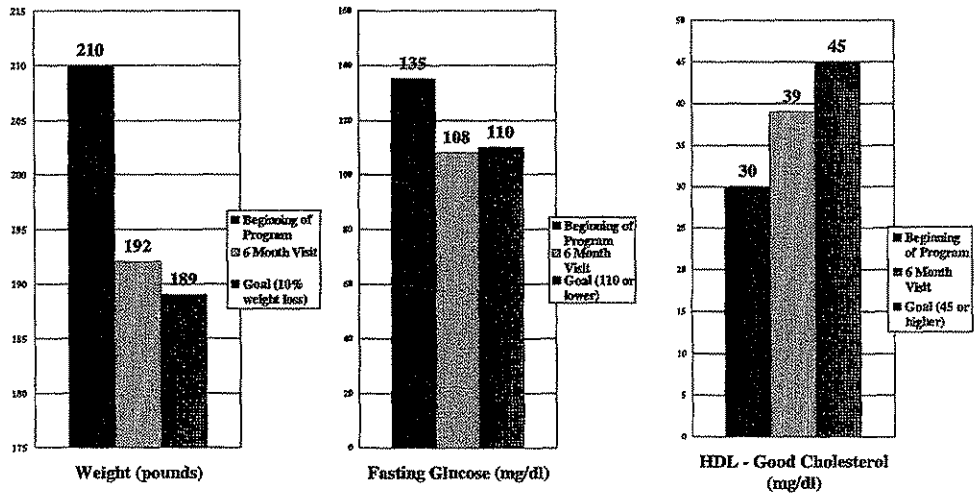

Figure 1. Change in parameters over 6 months for hypothetical client in weight loss program.

light the discrepancy between where the person is currently, and where he or she would like to be. Additionally, this situation provides an opportunity to reinforce self-efficacy and personal control by having the client focus on how his or her behavior may affect outcome.

- "You're not happy with the amount of weight you've lost so far. However, your blood pressure has dropped significantly, and your doctor has cut back on your medication. How does that strike you?"
- "So, in spite of your best efforts, you really haven't seen a change in either your weight or your lab values. What do you make of that?"
- "How do you anticipate things turning out if you continue just as you are?"

If a client is particularly frustrated, self-motivational statements may be prompted by affirming the client's perseverence, and asking the client what keeps him or her motivated.

> "You're really frustrated that you haven't lost as much weight as you would have liked. You feel you're giving this your all and getting nowhere! I can image that lots of people in your situation would say, 'I'm not losing weight. This program isn't for me—just forget it!' But you haven't done that. What keeps you going in spite of your frustration?"

When clients are satisfied with objective feedback. Motivational presentation of objective feedback is also helpful for clients who are satisfied with their current progress. The observation of positive change provides an ideal time to reinforce self-efficacy, drawing attention to specific behavior changes and how these changes influenced the data. Further, it can be a powerful experience to have clients reflect on how improvements in their data influence their self-perceptions.

- "So you can see that all your lab values fall in the normal range. What are you doing to keep these things under such good control?"
- "That's great! You've really been making an effort to make changes in both your eating and exercise. You walk at least four times a week, you take your lunch to work, and you really changed the way that you cook at home. You can really see how those changes have affected not only your weight, but your blood pressure and cholesterol as well!"
- "From what you're telling me about the efforts you've made, it is clear that you're committed to sticking with this, and that commitment is paying off in the changes you see in your lab results. How do these changes make you feel about yourself?"

Additionally, clients who are satisfied with assessment results can be prompted to consider other factors that may compel them to remain motivated, or shifts that have occurred in their priorities.

- "It sounds like none of these values is concerning to you at this point—you're very pleased with where you are. Given that you're satisfied with where you are now, what is it that makes you want to start [or continue with] a weight loss program now?"
- "When you initially started the program, your primary goal was to get your cholesterol under control. As we've just talked about, your cholesterol is now well within normal limits—your doctor has even discontinued your cholesterol medicine! Since you've met your original main goal, what keeps you interested in continuing to lose weight?"

Negotiating a plan for change. Another key component of MI is the process of negotiating change. Although the goal of most interventions is to produce behavior change, MI takes a somewhat unique approach that minimizes therapist-directed problem solving and emphasizes the development of discrepancy between a client's current and desired behaviors. Identification of the specific strategies that will be implemented to produce dietary and physical activity change is left to the client (with some subtle shaping by the therapist!).

Avoid problem solving. Many traditional weight loss programs attempt to evoke behavior change through problem solving. Although formal problem-solving strategies are helpful and appropriate in many circumstances, therapists using MI typically do not immediately focus on removing barriers or "fixing" problems. Rather than viewing the expression of difficulties as barriers that need to be overcome or problems to be solved, motivational interviewers view such issues as signs of increased ambivalence. These issues are frequently dealt with effectively through a process of reflective listening and targeted questioning, rather than active resolution by the therapist. When a therapist actively suggests solutions to a perceived problem or barrier, the client often responds with a reason why that solution is not feasible. The interchange that evolves often entails significant effort by the therapist, and a series of "yes, buts" on the part of the client. MI sidesteps the "yes, but" issue by emphasizing reflective listening rather than therapist-directed formal problem solving. The following example contrasts a problem-solving orientation with MI.

> CLIENT: I keep telling myself that I need to exercise, but by the time I get up and get to work and rush home, there just aren't enough hours in the day.
> PROBLEM-SOLVING THERAPIST: What things have you tried to fit exercise into your day?

MI THERAPIST: So it sounds like you really want to exercise, but you're struggling with how to fit it into your busy schedule.

Developing discrepancy. One strategy for promoting readiness to change involves clarifying the discrepancy between a client's current behavior and where he or she wants to be. Amplifying this disparity creates discomfort and dissonance within the client, which can be rectified through behavior change.

CLIENT: I'm tired of going around like this. I used to be thin and active. That's how I think of myself, but then I look in the mirror and I see this incredibly obese person.

THERAPIST: There is a big difference between how you feel on the inside and how you look on the outside, and this is uncomfortable. You want your outside self to match your inside self.

CLIENT: Exactly, I hate looking at myself in the mirror, because it's just not me, but then I turn right around and eat a bag of cookies.

THERAPIST: So, not only does the "you" in the mirror seem like a stranger, but sometimes your behavior feels foreign as well. Sounds like you're in limbo—stuck between where you see yourself right now, and where you'd really like to be.

Strategic summaries of ambivalence to tip the balance in favor of change. After the exploration of a client's arguments for change, as well as the "not-so-good" things about making changes (i.e., exploring ambivalence), it is important for the therapist to offer a summary. These summaries designed to promote behavior change differ from the relatively circumscribed reflective statements discussed above used to facilitate self-motivational statements. The goal of these "strategic" summaries is to both reflect the client's ambivalence and increase the likelihood of change by "tipping the balance." Tipping the balance in favor of change is accomplished by giving voice to both sides of ambivalence, but elaborating upon and emphasizing the client's personal reasons for wanting to change. The example below illustrates this strategy.

THERAPIST: So let me sum up here to see if I'm on the right track. From what you've told me, you really want to lose weight, but you tell yourself, "I've tried and tried this and it's just a waste of time." You feel like you're going to have to give up your ice cream, and you're afraid that you'll have to participate in forms of exercise that you really don't enjoy. Furthermore, you've been overweight for awhile and nothing bad has happened yet—your mom was overweight and nothing happened to her. But on the other hand, you've got all of these reasons you want to lose weight. You want to be a good role model for your daughter. You think that by losing weight she will be really proud of you. More importantly, she will also have an example to follow so that she can avoid some of the complications in her future that you fear for yourself such as heart disease or diabetes-related complications, such as amputations or dialysis. You also have high cholesterol and Type 2 diabetes, which your doctor has told you are made worse by your weight. You worry about what will happen with these health problems if you continue on just as you are—"Will I have a heart attack, or wind up on dialysis? Or could I lose my toes or even my feet?" You also want to lose weight because you really don't like being on medications—they are a hassle, they're expensive, and they sometimes make you feel sick—and you think that if you lost weight you may not have to take as much. Finally, even though your health isn't bad now, you're afraid that in the future it may get worse. You've seen what obesity can do and you feel it's in your power to prevent that from happening to you. So, like most people, you see some things that are not-so-good about changing right now. On the other hand, there are a whole lot of reasons that make you want to make some changes, and that's why you're here today.

Practical Case Example

An Initial MI Session

The following example is abstracted from a first session with Ms. Jones, a 44-year-old overweight woman recently diagnosed with Type 2 diabetes and newly enrolled in a behavioral weight loss program. In addition to building rapport, the primary goal for the first motivational interview is to obtain a good understanding of the client's reasons for wanting to lose weight, as well as the things that she views as "not so good" about making a change. Careful notes of the client's self-motivational statements and concerns about behavior change can be very helpful in later sessions when a plateau has been reached, the client has become less motivated to engage in the weight loss intervention, and/or increased ambivalence surfaces.

THERAPIST: Tell me a little bit about what your most pressing concerns are right now.

Commentary: Therapist begins the interview with an open-ended question to allow the client to introduce areas of concern that are not specifically related to weight loss. Focusing on weight-related issues will come later. Starting with those issues may prematurely focus the client.

CLIENT: Well, I was just diagnosed with diabetes three months ago, and that's really been hard. The doctor

tells me that if I lose some weight, it will help keep my sugar under better control. So I joined this program to try and take off some of the weight.

THERAPIST: So the diagnosis hit you pretty hard.

CLIENT: Yes! I know that I've been overweight my whole life, but I've always thought of myself as pretty healthy—I'm real active. And now somebody tells me I have a "chronic disease" and I may have to take medicine twice a day for the rest of my life. I just hate it!

THERAPIST: So this notion of having a "chronic disease" doesn't sit too well with you.

CLIENT: No—like I said, I'm an active person, and I've always thought of myself as healthy. And I'm not that old. It just seems like it may be all downhill from here. You know, first I get this diagnosis, and next thing you know I could wind up with all those bad complications—bad eyes and amputations. I just don't want that!

THERAPIST: So you've always seen yourself as an active, healthy person—someone who gets a lot of things done. And now you get this diagnosis of diabetes, and it really throws you for a loop. It just doesn't go with your concept of the healthy person you want to be. And on top of how this diagnosis is affecting you right now, you're concerned about what it might mean for you in the long run—problems with your vision, amputations—things down the road that you *really* don't want in your life.

Commentary: This summary highlights the discrepancy between the client's concept of herself (healthy, active) and her concerns about her current and future health status.

CLIENT: Right, it was like a wake-up call that said, "You're not healthy and you'd better do something about it soon!" It was the first time I'd ever thought of myself as not healthy.

THERAPIST: What does "not being healthy" mean for you right now?

Commentary: Open-ended question to elicit personally relevant definition of "healthy."

CLIENT: Well, I don't know . . . it's not that I don't feel good now. Since I started on these medications, I actually feel okay. I guess it's just the idea that I might not be able to do everything that I do now. I can't afford to let poor health get in my way. I'm a single mom, and I work full time. Plus I have a lot of responsibilities at church, and my dad is in a nursing home about 30 minutes from here—he really counts on me to come visit him.

THERAPIST: So, while your health hasn't gotten in the way of being able to take care of the important things in your life so far, the thought that you could be limited in your activities someday is enough to make you say, "Hey! I don't like this. I'm a healthy person, and I need to do what I can to stay that way. I've got all these people and things to take care of, and I've gotta take care of myself too."

Commentary: Therapist offers a reflective summary and elaboration, hoping to validate specific details associated with the client's reasons that not being healthy would be motivating for her.

CLIENT: Yeah, that's true. I need to take care of myself so I can keep taking care of others.

Commentary: Client responds to the summary with a self-motivational statement.

THERAPIST: Where do you see your weight fitting into all of this?

CLIENT: Well, my doctor says that losing weight will help with the diabetes, and that if I lose enough weight, I may even be able to go off my medication.

THERAPIST: How does that strike you?

CLIENT: Well, it'd be great to get off my medicine, and I know that losing weight would help, but I think that it's going to be hard. I've tried before, and it didn't work so great.

Commentary: Client expresses ambivalence.

THERAPIST: What has been your previous experience with weight loss?

CLIENT: I've tried diets here and there—cutting back on fat mostly—but I could only really stick with it once. I lost about 30 pounds about 5 years ago—I joined Weight Watchers. But eventually, I gained it all back, plus some.

THERAPIST: So you've tried a variety of diets over the years, but the only time it really took for you was about 5 years ago. What made that time more successful for you?

Commentary: Therapist is focusing on past success in an attempt to obtain additional information, elicit self-motivational statements, and enhance self-efficacy.

CLIENT: Well, I guess I just set my mind to it. My son was about 3, and I had just gotten divorced. I think I saw it as a time to take charge of my life. I wanted to make sure I could keep my act together to take care of my son. But then I was working like a dog, and just couldn't do everything. Eventually something had to give, and it was my eating.

THERAPIST: So, you had a period of time before where you were able to change your behaviors and lose some weight. You see part of your success as coming from the fact that you had just really put your mind to it. But then things got crazy with work and other responsibilities and you weren't able to be as consistent as you would have liked to be. And you gained the weight back. How do you see this time as being different for you?

Commentary: The therapist makes a reflective summary emphasizing personal control and self-efficacy, then asks about

her current experience as a way to elicit self-motivational statements.

CLIENT: For one thing, the diabetes. I was motivated before, but now I'm motivated *and* really scared. This is another time in my life when I feel like I need to take charge and put myself higher on my own priority list. I know it will be hard, but I think that I can lose weight—I've done it before, and this time I really can't afford to gain the weight back. I mean, it's my life we're talking about here.

THERAPIST: In terms of your health, this is a bigger deal than the last time you lost weight.

CLIENT: Absolutely—I'm much more concerned about my health now. And I think I can lose the weight this time. One thing that does concern me, though, is exercise. It's tough!

Commentary: The client expresses ambivalence about exercise. Therefore, the therapist will want to make a reflective statement and explore this.

THERAPIST: You think that you can lose the weight this time, but the exercise seems hard.

CLIENT: Well, I guess it's mostly just time—I actually don't mind exercise when I can find the time to do it. It's hard to fit into my schedule. Like I was saying before, I'm just running all day, and I'm tired when I get home. If I let myself sit down, the last thing I want to do is get back up and go for a walk.

THERAPIST: On the one hand, you know that the exercise is something that's really important in terms of having successful weight loss. On the other hand, it's tough to fit in with your busy schedule. It puts you in a tough bind.

Commentary: Rather than switching into a problem-solving mode, the therapist offers a reflective summary that focuses on discrepancy by expanding on the client's success in the past while acknowledging her concerns.

CLIENT: Yeah, it does. I mean, I think I can do it, it's just gonna take some serious effort to get started with it. But I feel better once I do it . . . for something that's such a pain to get out to do, I usually feel pretty good once I've done it.

THERAPIST: So, while you see exercise as a hard thing to fit into your schedule, it's important enough from your perspective to really make an effort to work in.

CLIENT: Yes. I think that it is.

THERAPIST: So exercise is one of the not-so-good things about the process of losing weight. From your perspective, what other things are not so good about losing weight?

Commentary: The therapist actively invites discussion about other issues related to potential ambivalence surrounding weight loss.

CLIENT: Well, the other thing that comes to mind is the issue with dessert. . . . I really like my sweets, and I know that I have to cut them out. I know that I have diabetes now, but I'm not sure whether I can do it, cut out the things that I love to eat the most. I'm not sure I'll be able to *really* stick to a program that wouldn't let me have any sweets; I'll do fine for a while but then I'll let loose and go crazy because I just feel too deprived.

THERAPIST: So another concern you have is about the possibility of totally having to give up sweets. Because of your diabetes, you're not sure how often you should eat sweets and desserts, and it's pretty hard to think about completely cutting out sugar. You'd wind up feeling deprived, and you're concerned about how that would affect your ability to stick with your weight loss efforts.

CLIENT: Yeah, it would be hard. I think that's what got me off track last time. I was so overwhelmed and trying to eat all the "right foods."

THERAPIST: You felt pretty deprived.

CLIENT: I sure did.

THERAPIST: So, these issues we've been talking about related to exercise and sweets are the things that seem not so good to you about losing weight. I imagine that some people who share your concerns wouldn't have even started a weight loss program like this. They might say, "Boy! Exercise is just going to be too hard to work into my busy life right now. I'm not sure how I'm going to be able to do that. Then, there is the issue with sweets. I really like desserts and I'm not sure I'm ready to change the way that I eat. I don't think that this program is for me." What's different about your situation?

Commentary: The therapist offers a reflective summary of the client's ambivalence and ends with a prompt for additional motivational statements. The therapist specifically does not attempt to problem solve these barriers, offer interpretations about all-or-nothing thinking, and/or provide dietary guidance.

CLIENT: Well, it *will* be hard to work exercise in, and I don't really want to have to give up dessert, but like I was saying before, I'm really scared and I'm going to do what it takes to lose this weight. It may not be fun, but my health is really important right now.

THERAPIST: So, even though there are some changes on the horizon that you are not crazy about making, you're really committed to doing whatever it takes to improve your health.

CLIENT: Yes, I am.

THERAPIST: Let me see if I'm getting the whole picture with where you are right now. At this point, you're really concerned about your health. You've always seen yourself as an active, healthy woman, someone who takes pride in getting lots of things done, and being there for others. Although you've been overweight for a long time, your health hasn't

interfered with your ability to get things done on an everyday basis. And then you're diagnosed with diabetes—and that's something that really hits you hard. You picture, even though you're feeling okay now, this could mean developing complications down the road. Then you'd have a hard time fulfilling your current responsibilities—as a mother, as a daughter, as an employee and as a volunteer. And that's something you really don't want to see happen. You realize that in order to be there for others in the long run, you're going to have to move yourself up on your own priority list and take care of yourself. You've decided that one of the key things that goes into taking care of yourself right now is losing some weight. While you have all these good reasons for wanting to lose weight, there are also some things that are not-so-good about it from your perspective. One of those things is exercise. You're a busy person, and it's just going to be tough to find time to work exercise into your schedule on a regular basis. You also have concerns about cutting down on sweets. Sweets are something that you really enjoy, and you worry that you might feel deprived if you discover that you need to cut sweets out completely in order to lose weight. So, it's a bit of a mixed bag for you. On the one hand, you have all these reasons for wanting to lose weight, but on the other hand, there are some things that may get in your way. But you feel that at this point in your life, your health is really your main concern, and you're committed to doing whatever it takes to stay healthy to ensure your quality of life for the years to come. Because of that, you're willing to try and make whatever changes you need to—even the ones that might be a bit challenging. Would you say that's a fair summary of where you stand right now? Anything you would add?

Commentary: The therapist provides a more comprehensive summary of the ambivalence, encompassing both Ms. Jones's arguments for change, as well as the things that she sees as being "not so good" about making a change. The therapist then tips the balance in favor of change by reiterating and amplifying the client's earlier statement of commitment. The summary ends with an invitation to address any missing aspects.

A Mid-Intervention MI Session

The following is a transcript of an MI session with Ms. Jones about 16 weeks after starting a cognitive behavioral weight loss program. The primary goals of this session are to enhance motivation and negotiate change by highlighting the discrepancy between Ms. Jones' current behavior and her ultimate goal.

THERAPIST: Tell me how you've been doing since last time we talked.

Commentary: The therapist again begins with an open-ended question, allowing the client freedom to initiate discussion about anything that may have come up since the last meeting that supercedes weight loss as a priority.

CLIENT: Pretty well, I guess. Things have been hectic at home and at work, but I'm trying my best to stick with my eating and exercise programs.

THERAPIST: Even though it's been busy for you lately, you've tried to keep your dietary and exercise habits a priority.

CLIENT: Yeah, I'm trying, but it's not going as well as I'd like.

THERAPIST: In what way?

CLIENT: Well, the diet stuff is going okay, I guess. I've been writing down everything that I eat, and most days I'm falling into the calorie range where I should be. And cutting back on the sweet stuff hasn't been as bad as I'd thought it would be. I haven't stopped eating dessert completely—I'm just eating much smaller servings. It's really the exercise that has been a hassle.

THERAPIST: So you feel pretty satisfied with where you are in terms of your eating. But as you predicted earlier, the exercise has been tougher. What's been going on with that?

CLIENT: Well, I tried getting up in the morning to walk before work, but kept hitting the snooze button on my alarm until it was too late. It just wasn't working for me. So then I decided to try to walk after work, but when I get home, I just can't seem to get back out the door again. I do wind up walking a couple of times a week, but I'm just not being consistent. And I know that I really need to be.

THERAPIST: So you're really between a rock and a hard place with the exercise now. You feel like it's important to be consistent, but you're having a really hard time figuring out a strategy that will work for you.

Commentary: The client has provided an opportunity that may elicit the problem-solving urge for a therapist. Rather than moving into the problem-solving interchange (which would likely evoke a "yes, but"), the therapist rolls with the resistance by making a reflective statement. The result is further elaboration on the part of the client.

CLIENT: Yeah, it's frustrating. I've lost some weight but not as much as I'd like, and the nutritionist who's leading my weight loss group tells me that exercise will really help.

THERAPIST: What do you think about that?

CLIENT: I think she's right. Consistent exercise really needs to be a priority for me now.

THERAPIST: What is important for you about *consistent* exercise?

Commentary: Rather than problem solving how to fit in more exercise sessions, the therapist focuses on the issue of consistency to develop discrepancy between the client's current behavior (walking a couple of times a week) and where she wants to be (exercising "consistently").

CLIENT: Yeah, well, that's a good start, but it just doesn't get you as far as working out four or five times a week.

THERAPIST: Tell me more about what you mean.

CLIENT: Well, like I mentioned before, right now I'm walking a couple of times a week, and I guess that's a good start, but I know that I could be doing better. When I lost all that weight before, I was walking almost every single day and I felt great.

THERAPIST: So, you see what you're doing now is a good start, but you're not where you'd like to be with the exercise, both in terms of how often you are active but also in how you feel. Tell me more about what kept you going when you *were* exercising consistently on most days.

Commentary: The therapist elicits self-motivational statements by exploring the positive aspects of consistent exercise in the client's past.

CLIENT: Well, some of it was the fact the walking helped me lose weight. But more than anything, I think that what kept me going was how I felt psychologically. When I was walking, my stress was under better control. I just felt better able to handle everyday hassles when I was exercising regularly. I also had more energy—I think I was probably sleeping better. And I felt good about myself—being "a walker" made me feel healthy. Heck, sometimes I even felt downright athletic!

THERAPIST: So you have firsthand experience of what consistent walking can do for you. When you were walking regularly before, you were able to manage your stress better—the day-to-day hassles just seemed more manageable. And you also really felt good about yourself. You felt healthy—sometimes even athletic. . . . It felt really good to see yourself as a walker. How do you see these things fitting in with your *current* goals?

Commentary: The therapist attempts to enhance self-efficacy and asks an open-ended question prompting the client to integrate previous success with her current experience.

CLIENT: Well, I'm sure that if I *were* walking consistently now, I'd feel good. I would probably be losing weight faster than I am now, and from what I can tell, it does help my blood sugar. I could sure use some stress reduction—between my son, work, and church activities, I'm pretty tense. I wind up not doing anything quite as well as I'd like. I think it would go a long way in helping me stay healthy and be able to take care of things.

THERAPIST: So, from your perspective, consistent exercise is something that can keep you on track in terms of your health.

CLIENT: Definitely! Exercise helps me feel good and stay cool—I handle things better.

THERAPIST: How do you see things playing out if you keep exercising like you have been?

CLIENT: Well, I don't think much would change at all. I'd probably not lose weight any faster than I am now, and I'd be frustrated at myself for not walking more regularly.

THERAPIST: So let me sum up and make sure I understand where you are. On the one hand, you're having a tough time figuring out how to get exercise incorporated into your schedule on a regular basis. You've been walking a couple evenings a week, and, although you see that as a good start, it's just not getting you where you want to be. On the other hand, you have some previous experience that encourages you. You've experienced firsthand the benefits of regular exercise a few years back, and you really see how those things are important in helping you reach your current goals. First of all, you see consistent walking as a key component in your weight loss—it would facilitate not only initial weight loss, but would help you keep it off over time as well. Additionally, you see the exercise as a way to really help manage your stress, and may go a long way toward helping keep you "healthy" and active so that you can accomplish all that you need and want to do. The trick from your perspective now is figuring out how to bump up the frequency of your exercise so that you can really see all these benefits.

Commentary: A summary that highlights and amplifies the discrepancy between the client's current behavior and where she would like to be sets the stage for behavior change. In this summary, behavior change is framed as something that would reduce this discrepancy and help the client establish the goals she has previously identified as personally relevant.

CLIENT: Exactly.

THERAPIST: What thoughts do you have about where to go from here?

Commentary: The therapist prepares to negotiate behavior change by inquiring about the client's preferences for future action, rather than initiating a round of formal problem solving.

Implications

The methods described in this article appear best suited as an individual adjunct to a comprehensive cognitive-behavioral weight loss program, rather than as an integrated

component of group treatment. Although weight loss groups may certainly be conducted in a manner consistent with the spirit and philosophy of MI, the specific individualized strategies would be very difficult to implement effectively in a group setting. To date, there are few empirical data addressing the application of MI as an adjunct to weight loss programs. Further research is needed to determine whether MI should be added as a standard addition to behavioral weight loss treatment, and investigations addressing the efficacy of MI in this context are currently under way. In the absence of definitive data, clinical judgment should guide the specific number and timing of MI sessions in the context of a weight loss program. MI may be particularly helpful during times likely to exacerbate ambivalence such as prior to initiation of group treatment, transitional points in the program (e.g., switching from weekly to biweekly meetings), and plateaus during weight loss.

References

Bien, T. H., Miller, W. R., & Borough, J. M. (1993). Motivational interviewing with alcohol outpatients. *Behavioural and Cognitive Psychotherapy, 21,* 347–356.

Brown, J. M., & Miller, W. R. (1993). Motivational interviewing on participation and outcome in residential alcoholism treatment. *Psychology of Addictive Behaviors, 7,* 211–218.

Jeffery, R. W., Drewnowski, A., Epstein, L. H., Stunkard, A. J., Wilson, G. T., Wing, R. R., & Hill, D. R. (2000). Long-term maintenance of weight loss: Current status. *Health Psychology, 19*(Suppl.), 5–16.

Kreuter, M. W., Strecher, V. J., & Glassman, B. (1999). One size does not fit all: The case for tailoring print materials. *Annals of Behavioral Medicine, 21,* 276–283.

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., & Rollnick, S. (1991). *Motivational interviewing: Preparing people to change addictive behavior.* New York: The Guilford Press.

Perri, M. G., Shapiro, R. M., Ludwig, W. W., Twentyman, C. T., & McAdoo, W. G. (1984). Maintenance strategies for the treatment of obesity: An evaluation of relapse prevention training and post-treatment contact by mail and telephone. *Journal of Consulting and Clinical Psychology, 52,* 404–413.

Prochaska, J., DiClemente, C., Velicer, W., & Rossi, J. (1993). Standardized, individualized, interactive, and personalized self-help programs for smoking cessation. *Health Psychology, 12,* 399–405.

Pronk, N. P., & Wing, R. R. (1994) Physical activity and long-term maintenance of weight loss. *Obesity Research, 2,* 587–599.

Skinner, C. S., Campbell, M. K., Rimer, B. K., Curry, S., & Prochaska, J. O. (1999) How effective is tailored print communication? *Annals of Behavioral Medicine, 21,* 290–298.

Smith, D. E., Heckemeyer, C. M., Kratt, P. P., & Mason, D. A. (1997). Motivational interviewing to improve adherence to a behavioral weight-control program for older obese women with NIDDM: A pilot study. *Diabetes Care, 20,* 52–54.

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