Facilitating Behavioral Change in Voice Therapy: The Relevance of Motivational Interviewing

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Purpose: The purpose of this article is to present an exploration of some of the issues surrounding adherence to vocal behavioral change in voice therapy within the context of Motivational Interviewing (MI) and to explore MI’s potential for integration into voice therapy (MI-adapted voice therapy). MI is a style of interpersonal communication in which resistance is minimized through the use of skillful listening in a directive, constructive discussion about behavior change. The goal of MI-adapted voice therapy is to enhance patient adherence to vocal behavioral change.

Method: A narrative review of the literature is presented, together with the experiences of the author with 10 adult patients with voice disorders who participated in MI-adapted voice therapy.

Results: It is shown that the principles of MI can be applied throughout the therapy program. Points of resistance to vocal behavioral change that were common across many patients appeared to be addressed appropriately by specific MI dialogue strategies.

Conclusions: It is concluded that MI-adapted voice therapy holds promise as an approach to address patient adherence to vocal behavioral change. However, research is necessary to define the efficacy of this approach and the factors associated with its efficacy.

Key Words: voice therapy, compliance, adherence, Motivational Interviewing, voice disorders

Voice therapy is predicated on adherence to behavioral change. Adherence may be defined as the extent to which a patient follows through with agreed upon or prescribed actions and does what the therapist expects him or her to do (Zweben & Zuckoff, 2002). The goals of voice therapy commonly include alteration of voice and speech production, as well as management of internal, environmental, and voice use factors that may be contributing to the voice disorder. Adherence to voice therapy includes regular attendance in voice therapy sessions and consistent practice of vocal behavioral changes within communicative activities of daily living (or in certain cases, the specific communicative events targeted by the therapeutic goals). Measurement of adherence, therefore, might commonly include session attendance and patient self-report, including maintenance of practice records and vocal behavior logs.

The potential effect of poor adherence on voice therapy outcome has been acknowledged in overviews of treatment practices (Mueller & Larson, 1992; Pannbacker, 1998) and therapy outcomes research (Murry & Woodson, 1992; Verdolini-Marston, Burke, Lessac, Glaze, & Caldwell, 1995). Therapy dropout, the ultimate nonadherence, is a common clinical problem. Roy et al. (2003) had 16% of 81 participants drop out over 6 weeks in a clinical trial comparing three therapy approaches involving teachers with dysphonia. Sellars, Carding, Deary, MacKenzie, and Wilson (2002) found 18% of 100 participants dropped out of therapy prior to completion of a preestablished six-session regimen. MacKenzie, Millar, Wilson, Sellars, and Deary (2001) reported a 25% dropout rate of 204 therapy participants after 6 weeks, with an additional 10% dropping out at 12 to 14 weeks.

Strategies commonly used in voice therapy to address poor adherence involve the traditional methods that have been used in health-related counseling (Zweben & Li, 1981), such as explanations to patients about what to expect from therapy and identification of behaviors that need to be changed to succeed in therapy. This approach is based on the theory that patients will become engaged in the therapeutic process if they understand clearly the purpose and rationale for the therapy techniques and the respective roles and responsibilities of patient and therapist (Butler, Rollnick, & Stott, 1996). This strategy, however, presumes that the patient is ready to change behavior and that a lack of information is the primary factor that could inhibit adherence. Based on my clinical experience, and consistent with the literature (Haynes, Taylor, & Sackett, 1979; Prochaska & DiClemente, 1983), the assumption that patients are ready to change is not always borne out by clinical reality. Patients can remain
poorly adherent despite learning about the benefits of therapy (Zweben & Zuckoff, 2002).

Historically, patients who did not follow medical advice were labeled recalcitrant. In the 1970s, use of the term compliance was advocated as being less judgmental. Compliance was defined as the extent to which a person’s behavior coincided with health-related advice (Haynes et al., 1979). More recently, the term has been faulted as implying conformity and obedience to authority and lack of patient will. Murphy and Coster (1997) modified the definition of compliance to include the patient’s willingness and ability to execute lifestyle changes. Others advocate use of the term adherence (Lutfey & Wishner, 1999; Miller & Rollnick, 2002) to emphasize patient autonomy and the complexity of factors that influence patient behavior. The terminology debate is important here only in that it reflects a shift in conceptual approach from viewing patient compliance as dominantly the responsibility of the patient to emphasizing the therapist’s role in eliciting patient adherence to behavioral change.

Motivational Interviewing (MI) is a therapeutic approach that may have the potential to facilitate the therapist’s ability to elicit adherence to behavioral change. This article addresses the theoretical basis of MI and the broad strategies of interpersonal dialogue that arise from this theory. Research data on the efficacy of this approach are examined. MI and its potential integration into a voice therapy program (MI-adapted voice therapy) are examined through the review of 10 patients with voice disorders who participated in MI-adapted voice therapy with the author. A concluding discussion explores the concept of adherence, with thoughts for future research needs.

Motivational Interviewing

Theoretical Basis

Miller and Rollnick (2002, p. 25) described MI as a style of interpersonal communication in which resistance is minimized through the therapist’s use of skillful listening in a directive, constructive discussion about behavior change. MI was initially developed by Miller (1983) and further developed with Rollnick (Rollnick & Miller, 1995) for treatment of individuals with alcohol dependence.

MI centers on eliciting the individual’s motivation to adhere to behavioral change in a nonthreatening manner. The approach incorporates concepts proposed in the transtheoretical stages-of-change model (Prochaska & DiClemente, 1983), which is a framework for understanding self-change at various points along a continuum of behavioral change. This model holds that poor adherence is a problem of motivation due to lack of readiness to change. Within this framework, an individual’s readiness to change is viewed as a function of the extent to which he or she has considered the advantages and disadvantages of change. Therefore, lack of motivation to initiate and adhere to change is viewed as a perceptual problem amenable to modification, rather than an innate personality attribute (Prochaska & DiClemente, 1983; Proschka, DiClemente, & Norcross, 1992). Four assumptions form the basis for MI, and from these arise five basic dialogue strategies (Rollnick, Mason, & Butler, 1999). These assumptions and strategies will each be considered in turn.

Assumptions

The four assumptions on which MI is based are as follows: (a) patient motivation reflects readiness to change, a dynamic state that varies with time; (b) readiness to change is susceptible to therapist influence and is dependent on interaction style; (c) readiness to change is related to a state of ambivalence, an internal struggle about behavioral change; and (d) every patient has the potential for behavioral change; it is the therapist’s task to release that potential and facilitate the natural change process inherent in the patient. These four assumptions of MI and the general principles that follow from them are derived from related theoretical constructs in social psychology, including cognitive dissonance (Festinger, 1957), self-efficacy (Bandura, 1977), and empathy (C. R. Rogers, 1959), further addressed below.

MI is a patient-centered approach, which means that the patient is considered an expert with regard to self-knowledge (such as personal thoughts, feelings, preferences, and needs; C. R. Rogers, 1959; Roter, 1987). In patient-centered therapy, the therapist acts as a guide to help the patient find his or her own motivation for adhering to behavioral change (C. R. Rogers, 1957/1992). This approach contrasts with directive therapy, in which the therapist as expert instructs the patient how to change in accordance with the therapist’s own value system (Rollnick, Heather, & Bell, 1992). In general, a patient-centered counseling approach may be more effective in motivating patients to adhere to behavioral change than more traditional directive models (Kaplan, Greenfield, & Ware, 1989; Ockene et al., 1991).

General Principles

MI identifies four general guiding principles to engage patients who are ambivalent about making changes to their behavior: expressing empathy, developing discrepancy, rolling with resistance, and supporting self-efficacy (Miller & Rollnick, 2002).

1. Expressing empathy. C. R. Rogers (1957/1992, 1959) developed the concept of empathetic understanding as a core element of counseling in which the therapist has a sensitive awareness, without judgment or evaluation, of the patient’s needs and reactions to events. Empathy, more than confrontation, may minimize resistance (C. R. Rogers, 1957/1992; Stott & Pill, 1990). MI guides the therapist to listen actively to the patient without communicating criticism, blame, or other judgments, regardless of personal opinions or biases. The therapist is directed to accept and even expect that the patient may be reluctant or unwilling to change behaviors in the early stages of therapy (Prochaska & DiClemente, 1983; Roter, 1987). Therefore, the first goal is to build excellent therapeutic rapport (Miller & Rollnick, 2002). The therapist strives to acknowledge the patient’s maladaptive vocal behaviors as contextually understandable, that is, arising from certain needs of the patient. (The context of those needs is individual for each patient and must be discovered through
Dialogue Strategies

Miller and Rollnick (2002) outline five strategies used in MI to address the four principles just noted (expressing empathy, developing discrepancy, rolling with resistance, and supporting self-efficacy). These strategies involve (a) asking open-ended questions, (b) affirming, (c) reflective listening, (d) summarizing, and (e) eliciting change talk. All of these strategies represent the directive role of the therapist in MI and draw heavily from the social cognitive theories of Bandura (1977) and C. R. Rogers (1959).

1. Asking open-ended questions (see Appendix A). Open questions are those that cannot be answered with yes or no and are not framed with closed set answers. Such questions may facilitate rapport and help the therapist gain knowledge about the patient (C. R. Rogers, 1957/1992). In the spirit of patient-centered counseling, the patient does most of the talking within the clinical encounter. To achieve this conversational balance, the therapist is guided to limit herself to no more than three consecutive questions and instead to use other responses, such as affirmation and reflective listening statements, described below (Rollnick et al., 1992).

2. Developing discrepancy. The theory of cognitive dissonance (Festinger, 1957) holds that ambivalence is resolved by focusing on inconsistencies in personal rationales of behavior. Based on this theory, MI directs the therapist to create and amplify discrepancy in the patient’s mind between present and past behavior and future goals, the goal being for the patient to present his or her own arguments for change. The rationale for verbalizing one’s own arguments for behavior change is based in self-perception theory (Berm, 1972; Hosford, Moss, & Morrell, 1995), which states that individuals have greater commitment to actions that they themselves defend. In health-related behavior change, verbalizing plans for change may facilitate adherence to behavioral change (Amrhein, Miller, Yahne, Palmer, & Fulcher, 2003). Verbalizing change plans may also help to increase the importance of behavioral change in the patient’s mind (Burke, Arkowitz, & Menchola, 2003).

3. Rolling with resistance. MI guides the therapist to allow, rather than to suppress, the patient’s expressions of resistance (Miller & Rollnick, 2002). This guidance is consistent with the assumption that resistance arises naturally from ambivalence to change and is an anticipated stage of behavioral change (Prochaska & DiClemente, 1983). The patient’s expression of resistance is hypothesized to allow him or her to feel comfortable expressing feelings without defense or defeat (Rotter, 1980) and helps enable the patient to become the source of the potential solutions (Nolan, 1995).

4. Supporting self-efficacy. Self-efficacy refers to an individual’s belief in his or her ability to change a specific behavior (Bandura, 1977). High self-efficacy may be a good predictor of behavior change (Fluery, 1992; Miller & Rollnick, 2002; Rosenstock, Stretcher, & Becker, 1988; Schwarzer & Fuchs, 1996). Therefore, within the framework of MI, the therapist is encouraged to support the patient’s self-efficacy by encouraging the patient to talk about positive changes made in the past and emphasizing the importance of being responsible for one’s own behavior.
Motivational Interviewing

Efficacy Research on Motivational Interviewing

A growing body of literature has explored application of MI to diverse health-related problems that involve behavior change, among them alcoholism (Project MATCH Research Group, 1997), drug dependencies (Stephens, Roffman, & Curtin, 2000), smoking (Stotts, DiClemente, & Dolan-Mullan, 2002), HIV risk (Harding, Dockrell, & Corrigan, 2001), diet and exercise (VanWormer & Boucher, 2004), adherence to medication (Broers et al., 2005). One of the earliest randomized controlled trials of MI efficacy was conducted by Project MATCH (1997), in which 1,726 participants with alcohol dependence were randomized to three types of outpatient treatments, one of which was based on MI principles and techniques. The MI-adapted program produced the greatest treatment effect, reflected in all outcome measures including biochemical tests. Since that time, randomized clinical trials have assessed the effect of MI-adapted treatments for other health-related problems. Stotts et al. (2002) assessed the efficacy of MI integrated into a smoking cessation program for 269 pregnant women who still smoked at 28 weeks of gestation after failing other smoking cessation therapies. Twenty-seven percent of the women in the MI-adapted treatment group successfully quit the habit and remained nonsmokers at 6 weeks postpartum, compared with only 15% of a control group of women who received no additional treatment.

Hettema, Steele, and Miller (in press) conducted a comprehensive meta-analysis of randomized clinical trials of MI efficacy. Seventy-two trials were reviewed, the earliest from 1991, representing 14,267 participants. The studies included in the meta-analysis addressed diverse health or behavioral problems, such as alcohol abuse, smoking, managing HIV/AIDS, drug abuse, gambling addiction, problems with intimate relationships, eating disorders, and diet and exercise. MI had a strong effect on increasing treatment retention and adherence for all behavior changes assessed except smoking and HIV risk (e.g., needle sharing). An independent meta-analysis of the same 72 studies published almost concurrently by Rubak, Sandbaek, Lauritzen, and Christensen (2005) yielded consistent analytic findings. Their summary of results showed that MI had a significant and clinically relevant effect in 75% of the studies across disciplines, showing an equal effect size on both physiological and psychological diseases. This finding is consistent with the findings of a systematic literature review by Noonan and Moyers (1997), who assessed 11 controlled trials specifically in alcoholism and drug abuse. Nine of the 11 studies provided data to support the hypothesis that MI theory, when integrated into other treatments, increases the efficacy of the treatments by way of improved adherence. Dunn, DeRoo, and Rivara (2001) systematically reviewed 29 randomized trials containing control groups. The studies assessed behavioral change subsequent to MI adapted to treatments in diet and exercise, substance abuse, HIV risk reduction, and smoking. At least one significant effect was found in 60% of the trials. Burke et al. (2003) conducted a meta-analysis of 39 controlled trials and found moderate effect size for MI in studies targeting behavioral change in alcohol and drug addiction, lifestyle changes required for diabetes and hypertension, dual diagnosis, and bulimia.

Although a large corpus of data from clinical trials supports the proposal that MI can be effective in facilitating behavioral change, the data also demonstrate that MI does not consistently improve treatment outcome and that variability of findings does exist within and across studies. One source of variability is the structure of the MI program. A number of methods may be used to integrate MI into clinical practice. MI may be a freestanding, primary treatment or a one-to-two session motivational prelude to another treatment (Rollnick et al., 2002). However, the most widely used approach is sometimes referred to as “adaptation of MI”; in this approach, MI is integrated into other training, such as a weight loss exercise program (Burke et al., 2003). Rollnick et al. (2002) acknowledged that the variability in MI structure and the potential for alteration of MI beyond its original principles and techniques have the potential to confound efficacy data and assessment of external validity of individual clinical studies.

A second source of variability in efficacy studies relates to the clinician who delivers the treatment. The large meta-analysis by Rubak et al. (2005) revealed that psychologists and physicians obtained a clinically relevant effect in approximately 80% of the studies reviewed, whereas nurses and other clinicians obtained only a 46% effect. However, when controlling for clinical training in MI, similar effects were obtained among the different clinical specialties. Extent of clinician training is acknowledged to be highly variable across studies and a likely factor in therapeutic outcome (Moyers, Martin, Manuel, Hendrickson, & Miller, 2005).

Another deficit in MI research is the lack of data to identify those elements of the MI approach that are most effective (Miller, 1996). For example, the relative contribution of
afﬁrming statements compared with open-ended questions in eliciting behavior change is unclear. In another example, potential differences in treatment outcome for patients who verbalize commitment early in the therapeutic process compared with those who commit later in the therapy also bear further examination (Amrhein et al., 2003). Also, additional data are needed to assess the long-term efﬁcacy of MI for different types of behavioral changes (McCambridge & Strang, 2005).

Patient-based factors may also have a substantial effect on MI efﬁcacy. For example, some evidence suggests that MI may actually be more effective with patients who demonstrate greater ambivalence to behavioral change than with patients who are already closer to committing to change (Hettema et al., in press; Project MATCH, 1997). Yet other evidence suggests that readiness to change may be directly correlated with adherence and treatment outcome (Treasure et al., 1999). Methods of assessing an individual’s stage of change need to be developed to further clarify the relationship among these variables (Wilson & Schlam, 2004).

And ﬁnally, MI may be differentially effective depending on the type of physiological or behavioral problems to which it has been applied. This factor is particularly germane to the external validity of the existing research relative to voice therapy. Whereas alcoholism, smoking, and drug use represent addictive behaviors with strong negative societal pressures, voice therapy represents training behavioral change for quality of life issues (although smoking cessation can certainly be a component of the vocal hygiene guidelines addressed in voice therapy) and, in particular, training new motor patterns. No published studies have addressed behavioral change that is directly comparable to voice therapy.

MI-Adapted Voice Therapy

Certain clinical considerations for patients with voice disorders may be expected to affect resistance, and therefore adherence, to voice therapy. Such considerations may include the following: a history of controlling interactions with medical professionals (e.g., the physician as “expert” telling the patient that he or she is abusing her voice); previous exposure to exaggerated vocal hygiene messages (e.g., eight glasses of water daily are necessary to avoid phonotrauma); confusion regarding vocal identity (this is “my” voice even though it doesn’t meet my needs); failure of other treatment modalities, including voice rest and medical management; prior experience with nonadherence in voice therapy; and lack of support from individuals in the patient’s life, including business colleagues, friends, and family members.

The broad purpose of MI-adapted voice therapy is to facilitate adherence to vocal behavioral change. MI-adapted voice therapy is predicated on the assumption that if patient adherence to voice therapy can be improved, then treatment outcome will improve. In the absence of empirical data, this statement remains an untested hypothesis. As a ﬁrst step, however, the feasibility of an MI-adapted voice therapy program is assessed, with the goal of evolving a treatment protocol and evaluating its effects.

In the spirit of assessing the feasibility of MI-adapted voice therapy, observations are presented here on 10 adult patients who participated in MI-adapted voice therapy. (Individuals who smoked or had neurological-based voice disorder were excluded from this review.) Table 1 provides descriptive information about the patients, including the circumstances surrounding their therapy cessation. Two patients self-discharged prior to completion of the therapy. Two other patients, currently in therapy, stopped attending weekly sessions soon after they began voice therapy due to ﬁnancial hardship. Of note, however, both patients remained in therapy on a less frequent basis, once every 2 to 3 weeks, and have consistently attended therapy on that revised schedule. The remaining 6 patients completed treatment as prescribed and also attained their therapy goals, as determined mutually by the author and the patient. Goal attainment was judged using clinical observation and dialogue with the patient about the voice disorder. Data from subjective and objective outcome measures were addressed in the dialogue but did not in themselves serve as criteria for goal attainment.

Therapy sessions were generally held once a week for 50 min. The standard skills-based target of the sessions varied depending on the nature of each patient’s voice disorder but generally included attention to body alignment using the Alexander technique (attention to body position, balance and support, and increasing one’s body awareness; Emerich, 2003; Jain, Janssen, & DeCelle, 2004), attention to breath support, freeing oral articulatory movements through exercises to increase range of motion, and use of resonant voice techniques (Verdolini, 2000), which target acoustic output containing strong harmonic structure without hyperadduction of the vocal folds (Berry et al., 2001). An independent MI-trained psychologist viewed a sample of video recordings of the sessions and conﬁrmed adherence to the principles and strategies of MI.

From analysis of the sessions by the author and the independent MI rater, it was observed that the principles of MI were generally applied throughout the therapeutic process. Expression of empathy, developing discrepancy, rolling with resistance, and supporting self-efficacy were interwoven throughout all aspects of patient–therapist dialogue and did appear to reﬂect a “spirit” of interpersonal communication, as described by Miller and Rollnick (2002, p. 326). Speciﬁc points of resistance that were common across most of the patients seemed to be particularly well-suited to MI dialogue strategies. For example, resistance to participating in voice therapy often arose within the ﬁrst therapy session, framed by the patient as lack of time for therapy, having prior lack of success with speciﬁc voice therapy techniques (low self-efficacy), or uncertain belief in the value of therapy. These issues, if left unresolved, could lead to poor therapeutic adherence and ultimately therapy dropouts. The MI approach also seemed well-suited to handling decreased adherence to daily practice of skills-based techniques that occurred at different points throughout the therapy process. Common reasons for decreased adherence to practice included perceived lack of forward progress in symptom relief and difﬁculty integrating techniques into real-life situations. In these situations, the MI training provided a “conﬁdent readiness” on the part of the author to both anticipate and manage patient resistance.
TABLE 1. Characteristics of the 10 patients.

<table>
<thead>
<tr>
<th>Patient</th>
<th>Age (years)</th>
<th>Gender</th>
<th>Duration of voice problem</th>
<th>Diagnosisa</th>
<th>Vocal demandsb</th>
<th>Prior voice therapy (duration)</th>
<th>Voice problem severityc</th>
<th>Number of MI sessions</th>
<th>Reason for discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>22</td>
<td>Female</td>
<td>3 months</td>
<td>Bilateral benign vocal fold lesion</td>
<td>Professional, occupational, social</td>
<td>None</td>
<td>Mild</td>
<td>5</td>
<td>Achieved goals</td>
</tr>
<tr>
<td>2</td>
<td>31</td>
<td>Male</td>
<td>5 years</td>
<td>Unilateral benign vocal fold lesion</td>
<td>Routine</td>
<td>None</td>
<td>Moderate</td>
<td>2</td>
<td>Self-discharged Ongoing</td>
</tr>
<tr>
<td>3</td>
<td>38</td>
<td>Male</td>
<td>“always”</td>
<td>MTD</td>
<td>Occupational, social</td>
<td>2 years prior (for 8 months)</td>
<td>Severe</td>
<td>7</td>
<td>Achieved goals</td>
</tr>
<tr>
<td>4</td>
<td>27</td>
<td>Female</td>
<td>2 years</td>
<td>Postop, for polyp, MTD</td>
<td>Social</td>
<td>1 year prior (for 3 sessions)</td>
<td>Moderate</td>
<td>18</td>
<td>Achieved goals</td>
</tr>
<tr>
<td>5</td>
<td>45</td>
<td>Male</td>
<td>1 year</td>
<td>MTD</td>
<td>Social</td>
<td>4 months prior (for 2 sessions)</td>
<td>Moderate-Severe</td>
<td>14</td>
<td>Achieved goals</td>
</tr>
<tr>
<td>6</td>
<td>30</td>
<td>Female</td>
<td>2 months</td>
<td>MTD</td>
<td>Routine</td>
<td>None</td>
<td>Moderate</td>
<td>4</td>
<td>Self-discharged Ongoing</td>
</tr>
<tr>
<td>7</td>
<td>44</td>
<td>Male</td>
<td>2 months</td>
<td>MTD</td>
<td>Social</td>
<td>9 months prior (for 4 sessions)</td>
<td>Mild-Moderate</td>
<td>12</td>
<td>Achieved goals</td>
</tr>
<tr>
<td>8</td>
<td>21</td>
<td>Female</td>
<td>8 months</td>
<td>Postop for polyp</td>
<td>Social, Occupational, social</td>
<td>6 months prior (for 10 sessions)</td>
<td>Mild-Moderate-Moderate</td>
<td>9</td>
<td>Ongoing</td>
</tr>
<tr>
<td>9</td>
<td>74</td>
<td>Male</td>
<td>3 months</td>
<td>Presbyphonia &amp; MTD</td>
<td>Routine</td>
<td>None</td>
<td>Moderate</td>
<td>8</td>
<td>Achieved goals</td>
</tr>
<tr>
<td>10</td>
<td>26</td>
<td>Female</td>
<td>“always”</td>
<td>Unilateral benign vocal fold lesion</td>
<td>Social</td>
<td>None</td>
<td>Mild</td>
<td>11</td>
<td>Achieved goals</td>
</tr>
</tbody>
</table>

Note. MI = Motivational Interviewing; MTD = muscle tension dysphonia.

a The diagnosis or diagnoses provided by the referring laryngologist.
b Routine = no significant activity; social = frequent socializing in noisy environments or self-described loud family interaction style or recreational singer; professional = singer or actor; occupational = teacher, salesperson, or other occupation requiring significant voice use.

c Patient self-assessment at the first therapy session using a 5-point equal-appearing interval scale.

Toward the goal of evolving a treatment protocol for MI-adapted voice therapy based on these data, a dialogue technique called “typical day” (Rollnick et al., 1999, p. 112) appeared to be particularly useful in the initial therapy session. Deceptively simple in its structure, this technique entails the patient being asked to describe a typical day from beginning to end. Vocal behaviors can be emphasized within this task, but that description is not absolutely necessary. (Alternatively, the “worst day of the week” can be elicited.) It is likely that some form of this question is commonly used by many voice therapists, but this MI technique is unique in two ways. First, the patient is encouraged to provide a relatively long discourse, speaking for approximately 3 min, uninterrupted except for active listening utterances by the therapist (see discussion above regarding the use of open-ended questions to move the dialogue forward and reflecting and summarizing statements to check the therapist’s understanding). Second, MI guides the therapist to avoid formulating hypotheses during the dialogue about vocal behaviors that require changing. The simplicity of this task is deceptive because, in fact, it can be quite challenging to elicit a coherent narrative and avoid jumping ahead of the patient to therapy strategies. The purpose of the task is to help the therapist understand the patient and the voice problem. This task is helpful for establishing rapport and obtaining contextually relevant information about the patient’s voice problem. Contextual relevance means that the patient’s behaviors (including ambivalence to change) can be placed within the perspective of the patient’s daily life.

Two dialogue techniques were found by the author to be particularly useful for elicitation of change talk. The “Decisional Balance” worksheet (see Appendix F; Rollnick et al., 1999, p. 82) was used to help the patient develop discrepancy between having a voice problem and his or her resistance to addressing the problem. In another task, the “Change Plan” worksheet (see Appendix G), the patient identifies specific behaviors to alter, the steps needed to achieve the change, and potential obstacles to achieving the goals (Miller & Rollnick, 2002, p. 137). This task seemed to help patients move to the next logical step in integrating voice production skills into daily life. In contrast, an approach that did not seem to be particularly appropriate for the voice patients was “Querying Extremes” (Miller & Rollnick, 2002, p. 81), in which the patient is asked to imagine the extreme consequences that might ensue from the voice disorder. This task seemed to require making an assumption that if a voice disorder is left untreated, it could progress in severity and become life-threatening. The Querying Extremes task may well be more appropriate for some of the health-related problems from which MI was developed, such as drug and alcohol addiction.

It was noted that one common practice that may be inconsistent with the principles and techniques of MI is use of the terms vocal abuse and misuse (Colton & Casper, 1996). By emphasizing the general principle of expressing empathy to minimize resistance to change, MI advises the therapist to show a sensitive awareness of the patient’s needs and reactions to events without judgment or evaluation. Use of the
terms abuse and misuse seems negative, with the potential to imply a personality shortcoming (e.g., there’s something wrong with you that you mistreat your voice). Verdolini (1998) recommends the term phonotrauma instead of abuse and misuse; this is defined as those voice use patterns leading to traumatic tissue changes of the vocal folds. In keeping with the MI principles, a therapist might try to consider the maladaptive vocal behaviors as contextually understandable, a task made easier by the “typical day” dialogue. For example, one could consider that frequent loud talking is not inherently an undesirable behavior, because the patient may need to use this style of speaking in response to ambient noise. The goal might then be to train the patient to produce loud voice in a way that does not promote phonotrauma.

Summary
The MI-adapted voice therapy program described in this article offers a comprehensive paradigm for eliciting adherence to vocal behavioral change. The MI framework conceives of patient motivation as a dynamic state of readiness to change. Within this framework, the patient’s ambivalence to change is normal and even expected. Ambivalence and resistance are amenable to interaction style (Rollnick et al., 1999), and therefore the speech-language pathologist shares in the responsibility for eliciting adherence to therapy. One may argue that the patient who is not ready for change is not ready for voice therapy, and the therapist should respect that state of nonreadiness. Certainly, not all patients with voice disorders that can be treated with voice therapy want or need therapy. But a premise of MI is that voice therapy will be effective only if the current behavior is in conflict with something that the person values more highly (Miller & Rollnick, 2002, p. 167). In most cases, the very presence of the patient in the therapist’s office implies that a conflict exists between vocal function and vocal needs. Exploration of the patient’s readiness to change is neither coercive nor a violation of the patient’s autonomy.

I found that the adapted MI approach fit naturally into voice therapy treatment. It should be noted, however, that incorporating MI into voice therapy also requires behavioral change on the part of the voice therapist. Similar to our patients, we may be ambivalent about change and unwilling to give up our own therapeutic habits even when they do not yield productive results. However, the experiences with these voice patients suggest that the principles and strategies of MI may be appropriate for speech-language pathologists. MI-adapted voice therapy may help voice patients overcome resistance to change and participate more fully in voice therapy, thereby achieving improved voice outcome. Certainly, considerable research is needed to test that hypothesis.

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References


Appendix A
Examples of Open Questions

What do you like about the sound of your voice?
If you could change anything about your voice, what would it be?
Why are you seeking voice therapy at this time?
What types of voice therapy strategies, if any, have worked for you in the past?

Appendix B
Example of Affirming Statements

PATIENT: I want to try to focus on using more breath support when I’m talking, but I can’t think about that and also concentrate on what I’m trying to say. When I’m training people at work, I have to concentrate on what I’m saying, not these exercises.
THERAPIST: You’re highly professional and good at what you do. It’s important that you are completely focused on your training presentations to maintain their high quality.
PATIENT: And at the same time, I know my throat is going to start to really hurt and my voice will crack after about 15 minutes of talking, so I really want to do something about my voice. I just can’t let it get any worse.
THERAPIST: The sore throat and cracking are preventing you from concentrating on what you’re saying.
PATIENT: Of course they are. If my choice is having to think about how horrible I feel or having to think about what technique to use to prevent the pain, then of course I’ll choose to think about the breath support or whatever. I mean I don’t want this pain. I need my voice.
THERAPIST: Well, it’s clear that you’re highly aware of your voice, which is excellent, and you’re capable of doing whatever it takes to make sure your voice meets your needs at work. I agree with your choice to incorporate some voice therapy strategies into your “training voice.” Let’s practice that.

Appendix C
Example of Reflective Listening

PATIENT: You know, my voice has sounded like this for a long time. It’s basically my voice and everyone recognizes my voice.
THERAPIST: So, you feel this voice is part of who you are, and it works for you.
PATIENT: It’s just that my throat hurts at the end of the day if I’ve been talking a lot.
THERAPIST: So you like the way your voice sounds, it’s really only the throat pain that’s a problem.
PATIENT: Well, no, I mean my voice could sound clearer, but that doesn’t really bother me. And I know the throat pain is connected to the way I speak, so I have to change that so I can do my job.
THERAPIST: And that worries you.
PATIENT: Well, yeah, I have to be able to do my job, and I don’t want it to hurt. But I don’t want to have to think about the way I’m speaking every time I talk. I can’t do that. I have to be able to think about what I’m saying. So, I’m not sure what I can do about this.
THERAPIST: And you’re wondering if maybe voice therapy is just not practical for you.
PATIENT: I guess so.
THERAPIST: You’re not sure.
PATIENT: I’m not sure what I want to be doing about this.
THERAPIST: So, on the one hand, you’re concerned about your voice, but on the other hand, you don’t particularly dislike the sound of it, just how it feels and your vocal stamina. So you’re not sure yet if voice therapy is right for you.
PATIENT: Right. It doesn’t make a lot of sense does it?
THERAPIST: I can see how you might feel confused at this point.

Note. Some of the statements made by the therapist “look” like questions, in that the patient responds to statements as though they are questions. Yet all of the therapist’s comments are, indeed, reflective statements. Reflective statements often elicit responses from the patient. These statements are powerful components of an interaction that move the dialogue forward in a nonconfrontational manner.
Appendix D
Example of Summarizing Statements

So, losing your voice completely last month for 2 days left you feeling worried. Although your voice always comes back eventually, you’re worried that one of these times, it’s not going to come back, or it’s going to really damage your vocal folds and you’ll need surgery. You’ve also mentioned feeling guilty about asking your supervisor if you could switch to not working directly with customers so that you can save your voice. And you’re worried your coworkers will think you aren’t pulling your weight at work—that you’re faking it, because they don’t really understand what a voice disorder is. What else?

Appendix E
Example of Assessing Change

THERAPIST: So, how important would you say it is for you to use resonant voice techniques every time you teach a class? On a scale of 0 to 10, where 0 is not at all important and 10 represents extremely important, where would you say you are?

PATIENT: I really don’t want to have to deal with anything else right now, like worrying about using the correct voice techniques. So, I’d say I’m probably a 4.

THERAPIST: Why are you at a 4 and not at a 0?

PATIENT: Well, because sometimes I do get worried that my voice may give out completely.

THERAPIST: You would be really upset if you had a permanent voice problem.

PATIENT: Well, yeah, of course.

THERAPIST: What would it take for you to go from a 4 to a higher number?

PATIENT: Well, I guess I’d have to find some ways to use these techniques without having to worry about thinking about them all the time.

THERAPIST: So you can’t think about how you are talking when you are teaching.

PATIENT: Well, no, I mean I could think about it every once in a while. It’s not like I have to be super concentrating on everything I say every second. It’s just not something I can divert my attention to on a regular basis or all the time.

THERAPIST: You can think about your voice while you’re talking sometimes, though.

PATIENT: Yes, I know I could do that, and I’m sure I could practice at other times, too. I mean, if I have to do something, I can do it.

THERAPIST: It sounds like you want to make some changes in how your voice works for you, and you see yourself as someone who can make those changes, and you’re confident that you can make those changes.

Note. The patient is asked to assess his or her motivation to change using a 0-to-10 scale, followed by a therapist-directed discussion to help the patient elaborate on the rating.

Appendix F
Example of Decisional Balance Worksheet

When we think about making changes, most of us don’t really consider all “sides” in a complete way. Instead, we often do what we think we “should” do, avoid doing things we don’t feel like doing, or just feel confused or overwhelmed and give up thinking about it at all. Thinking through the pros and cons of both changing and not making a change is one way to help us make sure we have fully considered a possible change. Thinking through in this way can help us to “hang on” to our plan in times of stress or temptation.

In the worksheet below consider all the reasons for and against change, and write those reasons in the appropriate boxes. It is important that you consider what specific change you might want to make, not the changes someone else has advised you to make.

Change being considered: Use a more forward placement of the voice and increased breath support for everyday speaking situations.

<table>
<thead>
<tr>
<th>Making a change</th>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better sounding voice</td>
<td>• Greater vocal stamina (can socialize at night and sound good in class)</td>
<td>• Have to think about it when I’m speaking (more work, distracting)</td>
</tr>
<tr>
<td>• Makes me feel good about my voice</td>
<td>• More to deal with in my life right now (I’m too busy and stressed)</td>
<td></td>
</tr>
<tr>
<td>• Helps heal my vocal folds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>It’s easier not to deal with it right now</td>
<td>• I don’t get callbacks, and I don’t get the parts</td>
<td></td>
</tr>
<tr>
<td>• I hate my voice when it sounds this way and I don’t get any parts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• I get depressed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• My vocal folds get worse</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. This task was completed with a woman who was a university student in vocal performance.
Appendix G
Change Plan Worksheet

The changes I want to make are:
1. Decrease loud talking (until I learn how to do it safely)
2. Decrease overall amount of talking
3. Follow a laryngopharyngeal reflux (LPR)-precautions diet

The most important reasons why I want to make these changes are:
1. Get my voice to sound clearer
2. Prevent my throat and neck from hurting after talking for a while
3. So I can stop worrying about not being able to do my job

The steps I plan to take in changing are:
1. Put a copy of the LPR precautions on my refrigerator and plan my grocery shopping using it
2. Go to voice therapy
3. Use e-mail more and phones less
4. Use my cell phone only for an emergency
5. Put “Don’t say it loudly” stickers in my office and by the telephone at home
6. Work on being a good listener to my friends and not the one talking all the time

The ways other people can help me are:
1. My supervisor at work can give me positive support.
2. My girlfriends can agree to understand that we won’t be talking on the phone.
3. My kids can respond when I ring a bell so I don’t have to yell for them.
4. My voice therapist can be understanding and supportive.

I will know that my plan is working if:
1. I don’t have to clear my throat much.
2. My voice sounds a little better.
3. My next ENT exam shows less redness and swelling on my vocal folds.
4. My throat and neck don’t hurt so much at the end of the day.
5. My girlfriends think that I am a good listener!

Some things that could interfere with my plan are:
1. If I feel like I just have to comment on everything when I’m talking with my friends
2. If I don’t plan meals that won’t aggravate my LPR
3. If my friends and supervisor don’t support me
4. If I quit voice therapy

What I will do if the plan isn’t working:
1. Be honest with my therapist and ask for help
2. Be honest with my closest girlfriends and ask for help
3. Make another plan that works better
4. Refuse to let myself feel like it’s useless to be in voice therapy, and just give up

Note. Throughout the process of eliciting change talk, the patient is encouraged to set personal goals with regard to behavior change. This change plan worksheet was completed with a woman who was a vocal “overdoer.”