Self-Report After Randomly Assigned Supervision Does not Predict Ability to Practice Motivational Interviewing ☆

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ABSTRACT

The objective of this study was to investigate the relation between self-report and objective assessment of motivational interviewing (MI) skills following training and supervision. After an MI workshop, 96 clinicians from 26 community programs (age 21–68, 65% female, 40.8% Black, 29.6% Caucasian, 24.5% Hispanic, 2.0% Asian, 3.1% other) were randomized to supervision (tele-conferencing or tape-based), or workshop only. At four time points, trainees completed a self-report of MI skill, using items from the MI understanding questionnaire (MIU), and were objectively assessed by raters using the Motivational Interviewing Treatment Integrity (MITI) system. Correlations were calculated between MIU and MITI scores. A generalized linear mixed model was tested on MIU scores, with MITI scores, supervision condition and time as independent variables. MIU scores increased from pre-workshop (mean = 4.74, SD = 1.79) to post-workshop (mean = 6.31, SD = 1.03) ($t = 8.69$, $p < .0001$). With supervision, scores continued to increase, from post-workshop to week 8 (mean = 7.07, SD = 0.91, $t = 5.60$, $p < .0001$) and from week 8 to week 20 (mean = 7.28, SD = 0.94, $t = 2.43$, $p = .02$). However, MIU scores did not significantly correlate with MITI scores, with or without supervision. Self-reported ability increased with supervision, but self-report was not an indicator of objectively measured skill. This suggests that training does not increase correspondence between self-report and objective assessment, so community treatment programs should not rely on clinician self-report to assess the need for ongoing training and supervision and it may be necessary to train clinicians to accurately assess their own skill.

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1. Introduction

Motivational interviewing (MI) is a well established evidence-based practice (e.g., Brown & Miller, 1993; Burke, Dunn, Atkins, & Phelps, 2004; Lundahl, Kunz, Brownell, Tollefson, & Burke, 2010; Miller & Rollnick, 2002; Rubak, Sandbaek, Lauritzen, & Christensen, 2005; Vasilaki, Hosier, & Cox, 2006; Wain et al., 2011) that requires direct observation and feedback to develop proficiency (de Roten, Zimmermann, Ortega, & Despland, 2013; Martino, Canning-Ball, Carroll, & Rounsaville, 2011; Miller & Rose, 2009; Miller, Sorensen, Selzer, & Brigham, 2006; Miller, Yahne, Moyers, Martinez, & Pirritano, 2004; Schoener, Madeja, Henderson, Ondersma, & Janisse, 2006; Smith et al., 2012). However, if clinicians could rate their ability to practice MI accurately, this would reduce the need for time-intensive observer ratings and feedback, thus making dissemination more time- and cost-effective.

To date, only a few studies have examined the relation between clinicians' self-reported ability to practice MI and their actual ability as assessed objectively by raters. In an early and small training study ($N = 15$), Miller and Mount (2001) established that clinicians'

perceived understanding about MI after workshop was not associated with actual skill as measured by objective assessment, and was frequently consistent with overconfidence. In a later randomized clinical trial evaluating different measures of feedback and coaching, self-reported understanding of MI among clinicians ($N = 140$) had little relation to actual proficiency. At best, positive correlations between self-reported understanding and direct measures of ability were significant but modest (ranging from .169 to .329) with at least one inverse relationship ($r = -.244$), suggesting unclear relations between self-report and ability (Miller et al., 2004). Additional studies suggest that clinician self-report of fidelity to evidence-based practice tends to be higher than independent rater evaluations (Carroll, Nich, & Rounsaville, 1998; Decker & Martino, 2013; Martino, Ball, Nich, Frankforter, & Carroll, 2009; Miller, Yahne, & Tonigan, 2003).

Martino and colleagues advanced the field by conducting a study evaluating the correspondence of assessment, in which clinicians, their supervisors, and independent raters all rated clinicians' performance using the same instrument for assessing MI skill. The findings by Martino et al. (2009) were consistent with earlier research (Miller & Mount, 2001; Miller et al., 2004) but added that, relative to observers, both clinicians and their supervisors were more positive in their evaluations of the degree to which the intervention was present and skillfully delivered (i.e., adherence and competence) (Carroll et al., 2000). More recently, Decker and Martino (2013) evaluated the relation between community-based clinicians' reported confidence in their ability to practice MI and their objectively-assessed MI skill following three training conditions (self-study; expert-led workshop and supervision; or workshop and supervision by expert-trained trainers from within the community program). Regardless of condition, self-report did not comport with objectively assessed ability, with the exception that increased confidence was associated with slightly increased competence in advanced MI strategies (e.g., addressing ambivalence).

That clinicians and even their supervisors do not accurately evaluate MI skill poses a significant problem for efforts to train clinicians and highlights the importance of evaluating whether other instruments or approaches might better lend themselves to correspondence between self-report and observer ratings. The present report is based on a larger study (Smith et al., 2012) which used the Motivational Interviewing Treatment Integrity (MITI) 2.0 code (Moyers, Martin, Manuel, Hendrickson, & Miller, 2005) to evaluate clinicians' MI skill over the course of workshop training and supervision, and affords another opportunity to evaluate clinicians' self-assessment. The MITI is a simpler tool than the Motivational Interviewing Skill Code (MISC), which was used in several of the prior studies (e.g., Miller & Mount, 2001; Miller et al., 2004), but like the MISC, the MITI collects moment to moment counts of key clinician utterances like open questions and reflections, as well as global scores of proficiency. The present study also randomly assigned clinicians to either workshop training alone, or workshop training followed by five individual supervision sessions, including written and verbal feedback, over the following 8 weeks, a relatively intensive supervision regimen. This affords the opportunity to examine whether clinicians' self-assessment of MI skill better corresponds to objective assessment after a substantial course of training and supervision.

The present report aims to replicate and expand on earlier investigations by examining the relation between trainee self-reported and objectively-assessed ability in a randomized clinical trial involving community-based clinicians receiving workshop training in MI followed by assignment to receive (or not receive) more extensive supervision.

1.1. Hypotheses

Our hypotheses are that (1) as previously found, self-reported MI ability will initially not be associated with objectively-assessed ability, but that (2) following longer-term MI supervision, self-reported ability will be associated with objectively-assessed ability. We expect that

written and verbal feedback during supervision will increase clinicians' ability to identify their level of skill, as supervision teaches clinicians to discern between MI and other counseling styles. In the current milieu in which MI is a well-known evidence-based practice, the hope would be that self-report could be a useful proxy for objective assessment in community settings once a clinician becomes proficient in MI.

2. Method

This report is based on a secondary analysis of a parent study that examined effects of different supervision conditions on the development of MI skills (Smith, et al., 2012). In brief, participants attended a 2-day MI training workshop and were then randomized to post-workshop supervision conditions. Participants assigned to tele-conferencing supervision completed five weekly practice counseling sessions. Each practice session included a simulated clinical interaction with an actor portraying a standard patient. The session was simultaneously monitored by a supervisor, who provided real-time feedback using tele-conferencing technology, and who provided follow-up written feedback. Written feedback included graphical scores and a narrative that outlined areas of strength and improvements needed. Participants assigned to tape-based supervision completed five weekly audio taped practice counseling sessions with actors portraying standard patients. The audio tape was then sent to a supervisor who provided the same type of written feedback, as well as verbal feedback via telephone to follow up on the written feedback, to provide opportunities for role-play and to address any questions or concerns the trainee may have had. Thus, participants in both supervision groups completed five practice sessions and received written and verbal feedback five times. Participants in the workshop only training condition received no feedback following the workshop.

All participants, those receiving either workshop training and supervision or workshop only, were assessed four times over the course of the training study: prior to the 2-day workshop (pre-workshop), within 7 days following completion of the workshop (week 1 post-workshop), and at weeks 8 and 20 following the workshop. All four assessments were based on audio taped clinical sessions between the clinician participant and a client enrolled at their treatment clinic. Each audio taped session was used to assess the clinicians' MI skill using the MITI.

The study was approved by the institutional review board of the New York State Psychiatric Institute, as well as by the institutional review boards of every participating community treatment program. All participating practitioners and clients gave written informed consent.

2.1. Main outcomes of parent study

By the end of the study period, participants in the tele-conferencing supervision condition demonstrated higher spirit and empathy scores than those in the workshop only condition; participants' scores in the tape-based supervision condition fell between those of the other two. Those in the tele-conferencing condition used fewer MI non-adherent behaviors and more MI adherent behaviors and exhibited greater reflection to question ratios than participants in the workshop only condition. The one unexpected finding was that those who received tape-based supervision demonstrated higher percent complex reflection scores when compared to those who received tele-conferencing supervision. In addition, at each assessment time point, clinicians completed the self-assessment Motivational Interviewing Understanding questionnaire (MIU) (Miller & Mount, 2001).

2.2. Practitioner–participants

Practitioners from 26 substance abuse community treatment programs affiliated with the Long Island and New York Nodes of the NIDA Clinical Trials Network were invited to participate. Potential