CAN SPECIALIZED TRAINING TEACH CLINICIANS TO RECOGNIZE, REINFORCE, AND ELICIT CLIENT LANGUAGE IN MOTIVATIONAL INTERVIEWING?

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INTRODUCTION

The effectiveness of motivational interviewing (MI) in the treatment of alcohol and other substance abuse disorders is well established. To date, the only mechanism of action in MI with strong empirical support is "change talk", defined as in-session verbal commitments by clients to change problem behaviors. Consistent relationships have been shown between therapist behavior and client speech during MI sessions, as well as between client speech and outcomes. Furthermore, Moyers et al. (2009) have demonstrated that client change talk mediates therapist behavior and alcohol use outcomes. Selective reinforcement of change talk has been posited as a specific mechanism of action in motivational interviewing (Moyers et al., 2009), and experimental studies have shown that clinicians directly influence the level of change talk seen from clients (Glynn & Moyers, 2010). The current study examines whether this "technical" component of MI can be taught in a straightforward manner that will increase actual client language in MI treatment sessions.

METHOD

Project ELICIT is a randomized clinical trial comparing two approaches to training in MI: training as usual (MIU), and training emphasizing the evocation and reinforcement of change talk (MI+). Participants were 190 substance use clinicians randomized to MIU or MI+ training workshops.

Characteristic	M	SD
Age (years)	45.5	10.6
Years Prior Clinical Experience		
In Mental Health	12.6	8.6
In Substance Abuse	9.6	7.9
Clinical Hours Per Week		
Treating Clients	25.8	11.5
Treating Substance Abuse Clients	22.3	11.3
Prior Hours Spent Learning MI	8.8	18.6
	_N_	_%_
Race		
American Indian or Alaska Native	4	2.7
Black or African American	11	7.4
White, not of Hispanic origin	119	80.4
White, Hispanic origin	4	2.7
Other	10	6.8
Multiracial	6	4.1

Table 1. Participant demographic characteristics at baseline.

Participants were asked to submit 5 work samples: at baseline, post-training, 3, 6, and 12 months. These were randomly assigned for sequential coding with an objective behavioral rating system (MISC 2.5: Houck et al., 2010) using specialized coding software (Glynn et al., 2011). Coders and participants were masked to training condition throughout the study. We hypothesized that MI+ clinicians would show greater attention to change talk (through reflections and questions) than would MIU clinicians.

RESULTS

Transition probabilities were computed using GSEQ (Bakeman & Quera, 1995) on available coded baseline (n=148) and 3-month (n=132) work samples. Approximately 32.5% of this sample focused solely or primarily on treatment for alcohol use disorders. In both groups, the probability of therapists responding to change talk (CT) with a closed question and responding to CT with a reflection of CT increased after training, as did the probability of client CT following a counselor reflection of CT. Preliminary between-groups analysis of log normalized odds ratios indicate a significant multivariate Time×Group interaction ($F_{(5,18)} = 3.327$, $p = .03$). This effect appears to be driven by 2 elements: clinicians responding to CT with an open question ($F_{(1,22)} = 4.814$, $p = .039$), and clients emitting CT following a closed question ($F_{1,22} = 5.648$, $p = .027$), with superior results for MI+ participants. From baseline to the 3-month follow-up point the MI+ group also showed a greater increase in CT and a greater decrease in counter-change talk (CCT) than did the MIU group, although these differences are not significant in these sessions.

MIU:

Baseline	MICO	MIIN	OQ	CQ	RCT	RCCT
CT	0.0584+++	0.0139	0.0785++	0.1565-	0.1069+++	0.017++
CCT	0.0202	0.0264+	0.0930++	0.1659	0.0248	0.0961+++

3-month	MICO	MIIN	OQ	CQ	RCT	RCCT
CT	0.0504++	0.0066	0.0644	0.0955-	0.1759+++	0.0217
CCT	0.0166--	0.0097	0.0652	0.0999	0.0472	0.147+++

MI+ :

Baseline	MICO	MIIN	OQ	CQ	RCT	RCCT
CT	0.0561+++	0.0123	0.0741++	0.1453--	0.1347+++	0.0112
CCT	0.0190	0.0324++	0.0743	0.1695	0.0114	0.1219+++

3-month	MICO	MIIN	OQ	CQ	RCT	RCCT
CT	0.0668+++	0.0062	0.0788+++	0.1251	0.1776+++	0.0125
CCT	0.0352	0.0143	0.0911+++	0.1081	0.0299	0.1576+++

Table 2. Lag-one conditional probabilities of therapist speech (columns) given client change language (rows). + = significantly more likely than chance, - = significantly less likely than chance.

MIU Baseline	CT	CCT
MICO	0.1125	0.0156--
MIIN	0.1241	0.0376
OQ	0.1935+++	0.0629+++
CQ	0.0926--	0.0394
RCT	0.4581+++	0.0345
RCCT	0.1012	0.369+++
3-month		
MICO	0.1217-	0.015---
MIIN	0.1111	0.0238
OQ	0.2404+++	0.0852+++
CQ	0.1479	0.0431
RCT	0.4987+++	0.0197---
RCCT	0.1538	0.3746+++

MI+ Baseline	CT	CCT
MICO	0.1387+++	0.0117-
MIIN	0.0982	0.0491+
OQ	0.1766+++	0.0413++
CQ	0.0799-	0.0338+
RCT	0.5082+++	0.0141
RCCT	0.1111	0.366+++
3-month		
MICO	0.1027	0.0253--
MIIN	0.1078	0.0419
OQ	0.2565+++	0.0784+++
CQ	0.1545+++	0.0424
RCT	0.4662+++	0.0365
RCCT	0.1598	0.3689---

Table 3. Lag-one conditional probabilities of client speech (columns) given therapist speech (rows).

SUMMARY

Therapists trained with a specialized emphasis on the evocation and reinforcement of change talk (as opposed to standard MI training) have more change talk from their clients during subsequent treatment sessions. In addition, their sessions also demonstrate a higher probability of client change talk immediately following behaviors emphasized during specialized change talk training than did sessions from therapists in the training-as-usual condition. It is worth noting that these effects were measured in the therapist's usual treatment setting with typical front-line substance abuse clients, rather than a rigorous laboratory setting with a homogenous client population.

These results support the hypothesis that a single active ingredient of an empirically-supported substance abuse treatment (MI) can be isolated and manipulated through specialized training. This means that future studies focusing on experimental manipulations of change talk, as opposed to simply measuring its association with outcomes, are feasible.

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