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Authors

Suchman, Nancy E
Borelli, Jessica L
DeCoste, Cindy L

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Can addiction counselors be trained to deliver *Mothering from the Inside Out*, a mentalization-based parenting therapy, with fidelity? Results from a community-based randomized efficacy trial

Nancy E. Suchman^{a,b}, Jessica Borelli^c, and Cindy L. DeCoste^a

^aYale University School of Medicine, Department of Psychiatry

^bYale Child Study Center

^cUniversity of California, Irvine, School of Social Ecology

Abstract

This study is the first evaluation of an approach to training addiction counselors to deliver an evidence-based parenting therapy - *Mothering from the Inside Out (MIO)* - and an active comparison - *Parent Education (PE)* - in a community setting, with fidelity. MIO targets psychological deficits associated with early stages of addiction recovery (e.g., emotional dysregulation, poor impulse control) by fostering improvement in maternal reflective functioning (RF) - the capacity to make sense of and manage strong emotions in oneself and the child. Fifteen addiction counselors were randomized to training in MIO versus PE, and completed 8 training sessions and a clinically-supervised 12-session training case. We hypothesized that (a) counselors would demonstrate fidelity to their assigned interventions during the training case, (b) group differences in fidelity would demonstrate that MIO and PE are distinct interventions, and (c) MIO counselors would show greater improvement than PE counselors in clinical reflective functioning (CRF) - the capacity to make sense of a patient and child's strong emotions. Support was found for all hypotheses. Results indicate the potential promise in training addiction counselors to deliver efficacious parenting interventions in addiction treatment settings.

Keywords

Intervention; Attachment; Mentalization; Substance Abuse; Counselor Training

Treatments Supporting Child-Mother Attachment Relationships: The Need for Evidence-Based Clinician Training

Although an increasingly large number of empirically-based treatments aiming to support the early child-mother attachment relationship have been developed in recent years (see Steele & Steele, 2018), there is an urgent need to for empirical demonstrations of the

effectiveness of training procedures so that these evidence-based treatments can be disseminated with confidence and continued effectiveness. In this paper, after acknowledging the broader science-to-service gap that is now well known in the field of intervention research, we report on an empirically-based approach to training community-based addiction counselors to deliver an evidence-based, mentalization-focused intervention with sustained fidelity. We then report findings from the first test of the training program's efficacy.

The Science-to-Service Gap in Psychosocial Intervention Research

Although efficacious psychosocial treatments for many mental disorders exist, patients who seek treatment in community settings rarely receive them (Onken, Carroll, Shoham, Cuthbert, & Riddle, 2014). One major cause for this science-to-service gap is the plummet in treatment effect size that often occurs when an intervention that demonstrated efficacy under conditions of high internal validity, in a controlled setting with research therapists, demonstrates less effectiveness under conditions of high external validity, in a community-based setting with community-based therapists (see Onken et al. for a detailed discussion). This drop in potency is often due to characteristics of the treatment setting, such as time and financial constraints that lead to compromises in intervention delivery, including format and duration, that, in turn, compromise treatment integrity, the extent to which the intervention is delivered as originally intended. In conventional staged intervention research, investigators typically move directly from efficacy trials to effectiveness trials without first adapting the intervention to the delivery context (Onken et al., 2014). One way to address the science-to-service gap is for researchers to develop and test training and supervision methods that can ensure sustained treatment fidelity when delivered by community-based clinicians, who, unlike research clinicians, are employees of the community treatment setting and may have varying levels of expertise in the research intervention (Onken et al., 2014).

Therapist Training and Treatment Fidelity in Evidence-Based Interventions

Adherence rating scales are among the best ways to assess counselor fidelity to a psychosocial intervention and are more likely to be accurate when conducted by raters with relevant clinical knowledge and expertise, such as clinical supervisors, compared with clinically-inexperienced, novice raters (see Martino, 2010). Research on clinical training with addiction counselors strongly suggests that the most successful training in evidence-based treatment has two major components: First, they begin with a blend of didactic sessions on intervention principles and practice, with opportunities to observe and practice techniques. Second, they offer intensive supervision where trainers directly observe counselors' sessions and offer feedback, coaching, and advice for improvement (Herschell, Kolko, Baumann, & Davis, 2010; Liddle, Rowe, Gonzales, Henderson, et al., 2006; Martino, 2010; Miller Yahne, Moyers, Martinez et al., 2004; Sholomskas, Syracuse-Stewart, Rounsaville, Ball et al., 2005). Regular and ongoing clinical supervision during intervention trials has also been linked with sustainment of treatment fidelity in multiple studies (see Beidas & Kendall, 2010 for a meta-analysis).

Mentalization-Based Treatment for Mothers with Substance Use Disorders

In response to neuroscientific evidence showing that alterations in neural reward circuitry associated with chronic substance use affect a mother's response to her infant (see Rutherford, Williams, Moy, Mayes, & Johns, 2011; Kim, Iyengar, Mayes, Potenza, Rutherford, & Strathearn, 2017), clinical scientists have increasingly been developing and testing parenting interventions that target psychological deficits associated with early stages of recovery from addiction, including emotional dysregulation and dysphoria, poor impulse control, and the absence of hedonic reward associated with caregiving. Many of these efforts target the parent's capacity to mentalize, or make sense of the emotional distress associated with pregnancy and parenting, in order to help parents who are in addiction recovery regulate strong emotions during stressful parenting situations (Pajulo, Pajulo, Jussila, & Ekholm, 2016; Paris, Herriott, Holt, & Gould, 2015; Stover, Carlson, & Patel, 2017).

Mothering from the Inside Out

Mothering from the Inside Out (MIO) (Suchman, DeCoste, McMahon, Dalton, Mayes, & Borelli, 2017) is a 12-session individual parenting therapy for mothers with histories of substance abuse that was developed to address the psychological deficits associated with addiction. MIO targets the mother's *parental reflective functioning*, the capacity to make sense of and manage strong emotional states and urges during stressful moments of parenting. Parental reflective functioning involves two components – the capacity to make sense of and manage *one's own* strong emotional experiences and the capacity to accurately perceive and make sense of a child's emotional experiences and attachment needs through a developmental lens (Suchman, DeCoste, Leigh, & Borelli, 2010). MIO is a two-pronged intervention that targets both self-focused and child-focused parental reflective functioning. MIO was designed as an adjunct to addiction treatment and is delivered on site in addiction treatment clinics where mothers are enrolled (for further details about the intervention, see Suchman, DeCoste, Ordway, & Bers, 2013, Suchman, 2016, 2018). In two completed randomized efficacy trials, in comparison to an active 12-session individual psychoeducational comparison intervention called *Parent Education (PE)*, MIO demonstrated greater efficacy for improving parental reflective functioning, mother-child interactions, and maternal substance use (Suchman, DeCoste, McMahon, Rounsaville, & Mayes, 2011; Suchman et al., 2017).

Therapist Reflective Functioning, Therapeutic Process and Treatment Outcomes

As mentalization-based interventions have increasingly received attention in the scientific literature, questions about the therapist's capacity for reflective functioning have become more central. These questions center on whether a therapist's RF capacity is related to patient treatment outcomes and whether the match between the therapist's and the patient's RF might also influence treatment outcomes. A handful of studies have found evidence that therapist RF and attachment style are related to therapeutic process and treatment outcomes. In a case study examining reflective functioning and treatment process in Transference-Focused Psychotherapy with several patients diagnosed with borderline personality,

Diamond and colleagues (2003) found that the patients' ability to develop the capacity for reflective functioning required that the patient's and therapist's RF be complimentary, that is, neither too parallel nor too discrepant. They also found that patients' improvement on adult attachment measures was most pronounced when their therapist's RF level was slightly higher than the patient's. In another study with 25 therapists and 1001 patients, therapist RF was found to predict therapist effectiveness (Cologon, Schweitzer, King, & Nolte, 2017). Therapist attachment classification also seems to be related to the therapeutic relationship. Dozier and colleagues (1994) found that case managers' adult attachment classification influenced the depth of their interventions with patients who had serious psychopathological disorders. Talia and colleagues (2018) similarly found that therapist attachment classification was related to distinct approaches to therapist attunement. Tyrell and colleagues (1999) found that case managers who were less deactivating with respect to attachment established better working alliances with patients who were more deactivating. Taken together, these findings indicate the importance of measuring therapist RF and considering it as a potential moderator of treatment process and outcomes.

Therapist RF and Clinical Training

Another growing focus in the scientific literature is on whether therapists can be trained to increase their RF levels. Ensink and colleagues (2013) have reported that novice therapists, who were psychology graduate students in their first year of training, showed improvement in mentalizing activity following a relatively brief training. In a case study of a consultation project with early childhood staff working with immigrant families, Ackman (2012) reported that psychodynamic clinical supervision helped the staff develop interventions to enhance their clients' RF which, in turn, led to improvement in their children's age-appropriate development. These preliminary studies suggest that therapist RF can be increased with clinical training.

Aims of the Current Study

Now that MIO has demonstrated efficacy in two randomized clinical trials, a third trial is being conducted to test MIO's efficacy when it is delivered by community-based addiction counselors in a community setting. In order to minimize the science-to-service gap, the current investigation's first aim was to test the efficacy of a 20-week counselor training package (8 weekly didactic and experiential training sessions followed by a closely supervised 12 week training case) for promoting sustained treatment fidelity. Specifically, we examined whether counselors who were randomly assigned to receive the 20-week training in MIO vs. the psychoeducation comparison (PE) demonstrated sustained fidelity to their respective assigned treatment by the end of the training case. We predicted that fidelity ratings during the 12-session training case would meet criteria for adequate fidelity to the assigned treatment. We also predicted that a comparison of MIO vs PE fidelity scores would indicate that MIO and PE are distinct interventions.

The second aim of this investigation was to determine whether, in comparison to addiction counselors assigned to PE training, addiction counselors assigned to MIO training would show notable improvement in their own reflective functioning capacity by the end of the 12-

week training case. To this end, we developed and piloted a method for measuring improvement in *clinical reflective functioning*, the therapist's capacity to make sense of emotional states in themselves, the patient and the child. We predicted that, in comparison with PE counselors, MIO counselors would show greater improvement in clinical reflective functioning by the end of the training case.

Method

Overview

This study was conducted in a large addiction treatment center located in a small northeastern city. The center offers comprehensive addiction services (e.g., relapse prevention groups, medical and psychiatric care, vocational services, and limited case management) to adults with drug and alcohol addiction problems living within a 30 mile radius of the city. As a Medicaid treatment provider, the program is the largest in the small metropolitan area for adults with limited financial resources.

Before recruitment began, the Human Subjects Protection Protocol for the study was reviewed and approved by IRB's at the lead author's academic institution and the treatment clinic where the study was conducted. Interested counselors and patients who met eligibility criteria completed informed consent procedures and baseline assessments and were randomized to one of two treatment conditions (MIO versus PE). Counselors in each study arm (MIO and PE) first completed an 8 week (16 hour) didactic training component during which they learned about their respective intervention principles and approaches and had opportunities to observe intervention demonstrations and practice intervention techniques. They then completed a closely supervised 12 week (12 session) training case with a single patient who was randomized to treatment. Treatment sessions were conducted weekly for 50 minutes across 12 weeks in conjunction with addiction treatment provided at the clinic. Mothers were allowed to reschedule their appointments as needed. If a patient left treatment before completion, a new training case was assigned. The sessions were videotaped and reviewed and rated for fidelity by MIO and PE trainers, respectively. Counselors and trainers met weekly for clinical supervision. At the end of the 12-week training case, counselors and patients completed their respective post-treatment assessments and patients then continued in the study for the 13-week follow-up phase. Counselors who met criteria for adequate fidelity and clinical reflective functioning became eligible to serve as parenting counselors in the larger randomized clinical trial.

Sample

Counselors and patients learned about the study through announcements in staff meetings and treatment groups, respectively. They also learned about the study through word of mouth from their respective peers.

Counselors.—Counselors were eligible to participate if they were employed full time in the addiction treatment center, had administrative approval to participate, and expressed interest in learning to deliver a parenting intervention to which they would be randomly assigned. Twenty-two counselors met eligibility criteria and were randomized to training (10

MIO, 12 PE). Of these, fifteen (8 MIO, 7 PE) completed the 8 week training and full training case. Four counselors were required to withdraw from the study because of changes in employment or medical reasons. Three counselors had not yet completed their training case at the time of this report. Demographic characteristics for the 15 counselors in the study are reported in Table 1. The average counselor age was in the mid-40s. A large percentage of counselors in each group was Caucasian (62.5%), had a Master's degree (87.5%), and was professionally licensed in their discipline (66.6%).

Patients.—Patients were eligible to participate if they were enrolled in outpatient services at the center, were caring for a child between 11 and 50 months of age, spoke fluent English, and were not experiencing a psychiatric crisis or significant cognitive impairment. Of nineteen patients who met eligibility criteria, completed informed consent and were randomized to treatment (12 MIO, 7 PE) fifteen completed treatment (8 MIO, 7 PE) and were therefore included in the training case sample (see Table 2 for demographic data). The average mother in the sample was in her late 20's/early 30's and had completed high school or the equivalent. A majority of mothers was Caucasian, cohabitating or married, unemployed, caring for 2 minor children, diagnosed with an opiate use disorder and enrolled in methadone maintenance. Target children were close to 3 years of age, on average, and more likely to be male.

Mothering from the Inside Out

The MIO intervention involves *fostering a process* (rather than delivering a specific content). The first and most important (but not unique) objective in this process is to form and maintain a therapeutic alliance. Without the therapeutic alliance, other intervention strategies will likely fail. The second and next most important (and unique) objective is to foster the mother's capacity to make sense of her own emotions during stressful experiences. The mother chooses the stressor that will be the focus of the session. The therapist listens for moments when the mother has become emotionally aroused or disengaged, an indication that her capacity to mentalize (i.e., think about her own internal mental states and their impact on others) has momentarily been lost. The therapist pauses the conversation and helps the mother uncover and make sense of the thoughts, wishes, emotions, and intentions – along with the events and her behaviors – that led up to her emotionally-aroused state. The third most important (and unique) objective is to foster the mother's capacity to consider her child's emotional needs during specific stressful moments. Once the therapist has helped the mother restore her capacity to think about her own emotional states, she pauses the conversation again and encourages the mother to imagine the thoughts, wishes, intentions and emotions that her child might have been experiencing during the stressful interaction. Developmental guidance about the child's emerging cognitive, language, motor and social capacities can be provided when the mother's expectations for the child appear to be unrealistic. Strategies for promoting a secure attachment (e.g., reading the child's emotional cues, being a secure base or safe haven) can also be provided when the mother expresses uncertainty about what to do or how to interact with her child in a specific situation (e.g., transition or separation). When developmental guidance and parenting strategies are offered, the therapist is careful to return to the mentalizing process so that this developing capacity in

the mother can continue to flourish. When the child's or mother's safety is at stake, a more directive approach is used until the unsafe situation is resolved.

Parent Education

Parent Education (PE: Dalton, de las Heras Kuhn, DeCoste, & Dennehy, 2010) was designed to represent psychoeducational parenting programs that are typically available in community settings and to control for the opportunity to establish a secure alliance with an individual counselor and receive individually-tailored parenting sessions. PE is a structured intervention that provides developmental guidance and parenting strategies for challenges that are typically encountered by parents with young children (e.g., child tantrums, bed wetting, sleep habits, limit setting, developmental milestones) and challenges that are typical for parents in substance abuse treatment (e.g., keeping children safe, self-care). Mothers met weekly with their assigned PE specialist to review a pamphlet chosen by the mother. Pamphlets were written at a 4th grade reading level.

Counselor Training

Overview.—MIO and PE training each involved a 16-hour instructor-led workshop (2 hours per week across 8 weeks) during which counselors learned about their assigned intervention's underlying principles, core components, techniques and content. Counselors also observed videotapes showing experts delivering their assigned intervention with participants from previous efficacy trials. Counselors had opportunities to practice techniques and receive instructor feedback during role play exercises. After completing the training workshop, each counselor was assigned a training case. Each of the 12 training case sessions was reviewed in its entirety and rated for fidelity by an instructor. Trainees continued meeting in their respective assigned groups for a 2 hour weekly supervision with the instructors to review the training cases and receive feedback on technique delivery, content, and timing.

MIO training and supervision.—Trainees assigned to MIO were trained by two instructors (including author N.S.) who provided an overview of attachment and mentalization theory, and described the core MIO intervention components. Following instruction on each core component, trainees participated in role play exercises that encouraged practice of the new therapeutic technique. Following the completion of core component instruction, trainees viewed videotaped excerpts from 2 MIO treatment cases – one from each instructor – completed during the previous clinical trial. The videotaped excerpts were shown in chronological order so that trainees had the chance to observe the natural treatment progression. Trainees were provided written transcriptions of the excerpts that allowed them to read examples of each mentalizing intervention as it was delivered. During clinical supervision of the training cases, trainees met weekly as a group to view portions of each videotaped treatment session from the previous week. These portions were preselected by the trainers who reviewed each entire session prior to the meeting). Trainers provided feedback on the 5 intervention components (therapeutic alliance-building, mentalizing stance maintenance, promotion of the mother's self- and child-focused mentalizing capacity, developmental guidance, and attachment-based parenting strategies). Feedback often involved helping the therapist identify moments in the session when the

mother's mentalizing capacity was lost, suggesting questions to ask to help bring the mother's mentalizing back on line, modeling how the therapist can maintain an open, inquisitive, not-knowing stance about the mother's internal experience, assisting the therapist to keep the child in mind and identify windows of opportunity to bring the child into the discussion, identifying moments when developmental guidance about the child's abilities was needed, and considering what attachment-based parenting strategies would be helpful.

PE training.—Trainees assigned to PE were trained by two instructors (including author C.D.) who provided an overview of child cognitive, language, and social development from birth to five years of age, along with associated parenting tasks and challenges. Trainers then introduced trainees to the binder of over 100 brief pamphlets designed to address common parenting concerns using developmental guidance and behavioral strategies and written at a fourth grade reading level. Instructors then reviewed with trainees how to assist participants to select a topic and pamphlet as the intervention focus and how to keep the session focused on the topic or on problem-solving when unexpected crises emerged. Following completion of the component instruction, the trainees viewed videotaped excerpts from previous PE sessions completed during the previous randomized trial. The excerpts provided the chance to observe sessions focusing on a wide range of parenting topics and addressing a wide range of concerns and unexpected crises. Trainees were then given the opportunity to role play challenging scenarios in order to build confidence in their competence to manage them. During training case reviews, each trainee received feedback on the behavioral parenting and child developmental guidance they offered mothers as they reviewed the chosen pamphlets. Video sessions were also reviewed.

Assessments and Measures

Overview.—Counselor fidelity to assigned treatment was rated by trainers at least once during each quartile (3 week period) of the training case. Clinical reflective functioning was rated prior to didactic training and after completion of the 12 session training case. Counselors received a \$25 Target or Walmart gift card after completing the post-training case Clinical RF assessment. Patient outcomes (publication forthcoming), including reflective functioning, caregiving interaction quality and child attachment status were evaluated at baseline, post-treatment and 13 week follow up. Patient substance use was measured weekly and psychiatric symptoms monthly. Patients were compensated monetarily for assessment completion.

Treatment Fidelity.—The *Revised MIO/PE Adherence Rating Scale* (Suchman, DeCoste, Dalton, & Bers, 2016) was used to measure treatment fidelity. Revised for the current trial, the measure contains nine items (three MIO, PE, and generic, respectively) each rated on a threepoint scale for *frequency of occurrence* (the number of times a particular therapist behavior is observed during therapy session) and *competence of delivery* (the degree to which the therapist intervention is considered appropriate and effective). MIO items include *Mentalizing Stance* (adopts a curious, inquisitive stance about mental and emotional experiences), *Focus on Mother's/Other Adult's Mental Experience* (explores or underscores mental experiences of mother and other adults), and *Focus on Child's Mental Experience*

[explores mental experiences and attachment needs of the child(ren)]. PE items include *Developmental Guidance* (age-related child physical, social, cognitive capacities), *Parenting Strategies and Child Assessment* (psychoeducation on parenting strategies, child behaviors), and *Child-Focus* (redirects focus to target-child). Generic items include *Alliance Building* (supportive, empathic statements, conveys genuine interest), *Works Collaboratively* (shares with patient responsibility for choosing the session topic), and *Self-Care and Interpersonal Problem Solving* (psychoeducation and exploration of self-care and interpersonal relationship strategies). On the *Frequency Subscale*, each item is rated either 1 (never or seldom occurs), 2 (occurs sporadically), or 3 (occurs consistently). On the *Competence Subscale*, each item is rated 1 (poorly executed), 2 (adequately executed), or 3 (well-executed). For both the frequency and competence ratings, a score ≥ 2.00 on the assigned treatment (MIO or PE) items and on generic items was considered adequate.

Treatment fidelity was rated by four trainers/supervisors (2 MIO, 2 PE) who were trained by authors N.S. and C.D. and rated their respective supervisees. Twenty-two MIO sessions were rated by both MIO raters and 21 PE sessions were rated by both PE raters. As shown in Table 5, for the 9 *Frequency Subscale* items, interclass correlations ranged from .55 ($p < .05$) to 1.00 ($p < .001$) and for the 9 *Competence Subscale* items interclass correlations ranged from .67 ($p < .05$) to 1.00 ($p < .001$). Interclass correlations equal to and above .55 were considered acceptable. Discrepancies greater than one point were discussed and agreed upon scores were entered into the final database.

Raters coded a total of 60 sessions (including the 43 sessions used to test interrater reliability) that were randomly selected from each quarter of the 12 session treatment phase (e.g., first quarter included sessions 1 – 3, second quarter sessions 4-6, etc.) so that a total of 4 sessions distributed across the 12-week treatment duration were coded for each of the 15 training cases (8 MIO, 7 PE).

The mean of the 3 item scores in each of the 6 subscales (3 frequency, 3 competence for MIO, PE, and generic, respectively) was used to represent the subscale score for each session. To confirm the frequency subscale construct validity, a principal components factor analysis was conducted first, extracting Eigenvalues greater than 1. A scree plot indicated a four-factor solution as the best fit. Next, a Varimax rotation was used in a second factor analysis with extraction restrained to four factors. As shown in Table 4, four robust factors were identified, with one factor representing MIO components, one factor representing PE components, and two factors representing generic components. Because items on the competence subscale were not expected to show a specific pattern, its construct validity was not examined.

Clinical Reflective Functioning.—The *Clinical Reflective Functioning Task* (Suchman, Carlone, & Borelli, 2017) was developed to measure addiction counselor RF in this study. During the task, counselors were shown 3 brief (3 – 5 minute) video clips of parenting interviews with mothers in addiction treatment. The recorded interviews were conducted as part of a previous clinical trial and used with subjects' written permission. Video clip selection targeted interview portions that involved stressful parenting situations (e.g., times when the mother felt angry or guilty or when her child felt upset or rejected). Before

viewing each video clip, counselors were given basic information about the case (e.g., children's ages, family configuration). Counselors were asked to watch each video, pause the video when new thoughts came to mind about the case, and share comments with a research assistant who audio recorded the counselor's response to each video. The first video clip was 3 minutes in duration and used to acclimate the counselor to the task. The second and third video clips were each 5 minutes in duration. Counselor responses to each video clip were audio recorded and transcribed. All counselors viewed the same set of video clips before training and a new set of video clips after completing their first 12-session training case to avoid possible training effects. This procedure was similar to the one used by Ensink and colleagues (2013) to evaluate therapist mental activity in response to mentalization-based training. Care was taken to insure that counselors were not familiar with any patients in the video clips before beginning the task.

Based on principles of coding adult RF (Fonagy, Target, Steele, & Steele, 1998) and parental RF (Slade, Aber, Berger, Bresgi, et al., 2003), a 5-point clinical RF rating scale was developed by authors N.S. and J.B. (both experienced parental RF coding trainers) for coding the transcribed counselor responses to each interview video clip. Scoring details and examples are presented in Table 3.

Coders first identified all levels of mentalizing present in the counselor's transcribed response to each interview video clip. The *highest* rating in each response was then recorded to indicate the counselor's *potential* mentalizing level. Coders then assigned an *overall* clinical RF score to represent the counselor's overall level of mentalizing during the response. The mean potential and overall RF scores, respectively, for the responses to the 2 video clips served as the final score for each counselor at each time point. Examples of scored counselor responses at pre-training and post-training case are provided in Table 4.

Two coders (authors N.S. and J. B.) who were blind to subject identity and time point coded all 30 CRF Task sessions (15 pre-training and 15 post-training case). Ratings by both coders of all of the 30 sessions were used to determine interrater reliability for scores on each of the 4 video clips. Interclass correlation coefficients ranged from .79 ($p < .001$) to .89 ($p < .001$) indicating excellent interrater reliability.

Data Analysis

Treatment fidelity.—To test whether therapists demonstrated adequate frequency and competence in delivering their assigned treatment, mean *frequency* and *competence* scores for each modality (MIO and PE) were computed and mean scores ≥ 2.00 for the assigned modality were considered adequate fidelity. For both MIO and PE, mean scores ≥ 2.00 for frequency and competence of *generic* intervention components was also considered adequate. To test whether MIO and PE are distinct interventions, independent *t* tests were used to compare *frequency* and *competence* means for each treatment component (i.e., MIO, PE, and generic), with the expectation that MIO counselors would show greater frequency and competence in delivering MIO components and PE counselors would show greater frequency and competence in delivering PE components. No significant group differences were expected for Generic component frequency or competence. The sample size of 60

sessions (32 MIO and 28 PE), was considered sufficiently powered to detect significant differences.

Clinical reflective functioning.—Although counselors were randomized to MIO vs PE training, because of the small sample size ($n = 15$) pre-training group differences in overall and potential clinical RF were examined to insure there were no meaningful baseline differences. *T* tests were conducted and effect size (d) was computed using baseline group means and pooled standard deviations with statistically significant and/or medium-to-large effects (i.e., $d \geq .50$) considered meaningful. Because pre-training clinical RF levels were not meaningfully different, repeated measures analyses of variance were considered appropriate for testing group differences in rates of change in overall and potential clinical RF, respectively (from pre-training to post-training-case). Significant treatment X time interactions were considered indicative of group differences in rates of change. *T* tests were also conducted to test for significant (a) within-subject improvement in clinical RF and (b) between-subject group differences in clinical RF at the post-training case assessment. Because of the small sample size, effect size (d) was computed using means and pooled variance to test for meaningful (a) within-subject improvement and (b) between-subject group differences at the post-training case assessment, with $d \geq .50$ (medium effects and larger) considered to represent a meaningful effect.

Results

Treatment Fidelity

As shown in Table 5, MIO therapists' frequency and competence in delivering MIO components were each above the 2.00 cut-off indicating adequate fidelity. PE therapists' frequency and competence in delivering PE components were also each above the 2.00 cut-off indicating adequate fidelity. Both MIO and PE therapists' frequency and competence in using generic intervention components also each met the 2.00 cut-off criteria.

As shown in Table 5, results of *t* tests for independent samples (testing the distinctness of interventions) indicate that MIO therapists were using MIO treatment components with significantly greater frequency ($t = 5.55, p < .001$) and competence ($t = 2.42, p < .05$) than PE therapists. PE therapists were using PE treatment components with significantly greater frequency ($t = 5.77, p < .001$) but not significantly greater competence ($t = .04, p = \text{n.s.}$). As expected, for generic components, there were no significant MIO vs. PE group differences in frequency ($t = 1.13, p = \text{n.s.}$), or competence ($t = 1.99, p < .10$) of delivery.

Clinical Reflective Functioning

As shown in Table 6, the effect size related to MIO vs. PE group differences at baseline in overall ($d = .37$) or potential ($d = .28$) clinical RF were small and therefore not considered meaningful. As shown in Table 7, counselors randomized to MIO training demonstrated significantly higher rates of improvement in overall clinical RF than counselors randomized to PE ($F = 5.28, p < .05$). A significant and large positive effect was found for within-subject improvement in overall clinical RF for MIO counselors ($t = 3.05, p < .05, d = .99$) but not for PE counselors ($t = .26, p = \text{n.s.}, d = -.10$). Although post-training-case group difference

in overall clinical RF level, favoring MIO counselors, were not significant ($t = 1.89, p < .10, d = .74$), they corresponded to a large effect that was considered meaningful, given the small sample size. As shown in Table 7, counselors randomized to MIO training demonstrated significantly higher rates of improvement for potential clinical RF than counselors randomized to PE ($F = 5.11, p < .05$). A significant and large positive effect was found for within-subjects improvement in potential clinical RF for MIO counselors ($t = 2.35, p < .05, d = .98$) but not for PE counselors ($t = .55, p = \text{n.s.}, d = -.07$). A meaningful post-training-case group difference in potential clinical RF, favoring MIO counselors, was indicated by a marginally significant large effect ($t = 2.05, p < .10, d = .71$).

Discussion

In this study, we examined the efficacy of a 20 week therapist training for *Mothering from the Inside Out* – an evidence-based parenting therapy that targets improvement in parental reflective functioning in mothers in addiction treatment. We also tested the efficacy of a 20-week training for an active comparison intervention called *Parent Education*. Both interventions were designed to be adjuncts to addiction treatment and to be delivered by addiction counselors. Findings generally supported our hypothesis that addiction counselors could be trained to deliver both MIO and PE with fidelity and that MIO and PE were distinct interventions. We also examined whether counselors randomized to MIO would show improvement in their capacity for reflective functioning by the end of training and at a faster rate than counselors randomized to PE. A new measure called the *Clinical Reflective Functioning Task* was developed and piloted for this purpose. Support was found for this second set of hypotheses as well.

Our findings provide preliminary evidence that addiction counselors can be trained to deliver parenting interventions with fidelity when training and supervision are sustained during intervention delivery. Our findings also provide preliminary evidence that addiction counselors can be trained to develop their own capacities for reflective functioning.

Prior to MIO training, during the task, counselors in both MIO and PE conditions showed some potential to consider the mental and emotional states of the patients presented and their children but, on the whole, they were thinking about the cases in purely behavioral terms. By the end of the 20 week training, MIO counselors were spontaneously and explicitly considering simple general mental states in the patients and their children and showing the potential to spontaneously make explicit mechanical and empathic references to patients' and children's mental states. In contrast, PE counselors continued processing video content in terms of simple, general mental states of mothers and children. However, improvements in therapist RF did not often reflect an increase in the therapists' consideration of their own mental states and emotions in response to the videotaped patient. It may be that videotapes are not as salient in activating the clinician's own internal mental responses and processes as live therapy sessions. It may also be that focusing on one's own mental states as a clinician requires additional training and/or supervision.

Study Limitations

This study is limited in several ways. First, given that the CRF measure was developed for this investigation, the lack of data from a control sample makes it difficult to know whether and how variations in the video stimuli at each time point may have influenced change in clinical RF. Moreover, the use of videotaped stimuli may not fully represent the therapist reflective functioning capacity in a live session. It may be that activation of therapist's emotions or anxiety in the session may be more salient in its interference with the therapist's ability to mentalize. Future development of live interaction paradigms might better capture this capacity. Second, given that a majority of the MIO-trained counselors were licensed Master's level professionals, it is unclear whether these findings will generalize to counselors with different professional credentials. Ball and colleagues (2002) compared master's level counselors with counselors in recovery from addiction and found that masters-level counselors were better able to integrate more psychodynamic work into their treatment and more flexible, eclectic and integrative in the conceptualizations of treatment. Counselors in recovery were more likely to adhere to 12-step principles. In future research, it will be important to examine training results as a function of prior training and credentials. It is also not yet known whether the good fidelity level of the MIO-trained counselors will translate into good patient outcomes. Finally, although fidelity raters had extensive knowledge and expertise in each of the intervention protocols they were not blind to treatment assignment.

Conclusions

Limitations notwithstanding, there are many advantages to training addiction counselors to deliver MIO and other parenting interventions. The counselors in both arms of the study were able to quickly establish strong alliances with their patients and to avoid stigmatizing and judging, likely aided by their understanding of addiction as a brain disease rather a deficit in willpower or character. They were typically eager to learn the material covered in their respective trainings, including attachment theory, parenting strategies and child development. Their skills and understanding about addressing relapses with patients allowed them to integrate the parenting and addiction into sessions when needed. Their full time presence at the addiction treatment program was often reassuring to patients when they completed the study. We expect that, over time, their training and experience in child development and parenting will become integrated into their practice in the treatment program and their interactions with other staff members. If MIO continues to demonstrate efficacy in a community-based setting when delivered by addiction counselors who are trained to sustain their fidelity, there is hope that the addiction treatment environment can effectively promote positive family relationships, offer a developmentally-informed setting where addiction treatment and parenting support are integrated, and foster better outcomes for children whose parents are in recovery.

Future Directions

There remains a need to examine therapist RF as a mediator of therapist approach (e.g., focus on external behavior versus internal experience) and as a moderator of treatment

outcome with this population in order to determine how best to match therapist to patient for the most optimal outcomes. There is also a need for tests of other factors contributing to the science-to-service gap, including rigorous examination of treatment components that are essential to positive outcomes (vs. those that are expendable or require modification), and potential barriers to implementation in the real world setting. As Onken and colleagues (2014) suggest, the intervention development process is incomplete until an intervention is optimally efficacious and implementable with fidelity by practitioners in the community. This investigation may bring evidence-based attachment interventions one step closer to achieving this aim so that they can be disseminated with greater confidence.

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References

- Ackman P (2012). Helping the helpers: Consultation to childcare staff using psychoanalytically-informed developmental concepts, *Psychoanalytic Inquiry*, 32, 186–204.
- Beidas RS, & Kendall PC (2010). Training therapists in evidence-based practice: A critical review of studies from a systems-contextual perspective. *Clinical Psychology: Science and Practice*, 17, 1–30. [PubMed: 20877441]
- Cologon J, Schweitzer RD, King R, & Nolte T (2017). Therapist reflective functioning, therapist attachment style and therapist effectiveness. *Administration and Policy in Mental Health and Mental Health Services Research*, 44, 614–625. [PubMed: 28132188]
- Dalton R, de las Heras Kuhn L, DeCoste CL, & Dennehy L (2010). Mommy and Me Growing Together. Unpublished Document. Yale University School of Medicine.
- Diamond D, Stovall-McClough C, Clarkin JF, & Levy KN (2003). Patient-therapist attachment in the treatment of borderline personality disorder. *Bulletin of the Menninger Clinic*, 67.
- Dozier M, Cue KL, & Barnett L (1994). Clinicians as caregivers: Role of attachment organization in treatment. *Journal of Consulting and Clinical Psychology*, 62, 793–800. [PubMed: 7962883]
- Ensink K, Maheux J, Normandin L, Sabourin S, Diguier L, Berthelot N, & Parent K (2013). The impact of mentalization training on the reflective function of novice therapists: A randomized controlled trial. *Psychotherapy Research*, 23, 526–538. [PubMed: 23964813]
- Herschell AD, Kolko DJ, Baumann BL, & Davis AC (2010). The role of therapist training in the implementation of psychosocial treatments: A review and critique with recommendations. *Clinical Psychology Review*, 30, 448–466. [PubMed: 20304542]
- Kim S, Iyengar U, Mayes LC, Potenza MN, Rutherford HJV, & Strathearn L (2017). Mothers with substance addictions show reduced reward responses when viewing their own infant's faces. *Human Brain Mapping*, 38, 5421–5439. [PubMed: 28746733]
- Liddle HA, Rowe CL, Gonzales A, Henderson CE, Dakof GA, & Greenbaum PE (2006). Changing provider practices, program environment, and improving outcomes by transporting multidimensional family therapy to an adolescent drug treatment setting. *The American Journal on Addictions*, 15, s1, 102–112. [PubMed: 17182425]
- Martino S (2010). Strategies for training counselors in evidence-based treatments. *Addiction Science & Clinical Practice*, 5, 30–39. [PubMed: 22002451]
- Miller WR, Yahne CE, Moyers TB, Martinez J, & Pirritano M (2004). A randomized trial of methods to help clinicians learn motivational interviewing. *Journal of Consulting and Clinical Psychology*, 72, 1050–1062. [PubMed: 15612851]

- Onken LS, Carroll KM, Shoham V, Cuthbert BN, & Riddle M (2013). Revisioning clinical science: unifying the discipline to improve the public health. *Clinical Psychological Science*, 2, 22–44.
- Pajulo H, Pajulo M, Jussila H, & Ekholm E (2016). Substance-abusing pregnant women: Prenatal intervention using ultrasound consultation and mentalization to enhance the mother-child relationship and reduce substance use. *Infant Mental Health Journal*, 37, 317–334. [PubMed: 27341555]
- Paris R, Herriott A, Holt M, & Gould K (2015). Differential responsiveness to a parenting intervention for mothers in substance abuse treatment. *Child Abuse & Neglect*, 50, 206–217. [PubMed: 26455262]
- Sholomskas DE, Syracuse-Stewart G, Rounsaville BJ, Ball SA, Nuro KF, & Carroll KM (2005). We don't train in vain: A dissemination trial of three strategies of training clinicians in cognitive-behavioral therapy. *Journal of Consulting and Clinical Psychology*, 73, 106–115. [PubMed: 15709837]
- Slade A, Aber JL, Berger B, Bresgi I, & Kaplan M (2003). The Parent Development Interview – Revised. Unpublished manuscript, City University of New York.
- Steele H, & Steele M (Editors) (2018). *Handbook of Attachment-Based Interventions*. New York: Guilford Press.
- Stover CS, Carlson M, & Patel S (2017). Integrating intimate partner violence and parenting intervention into residential substance use disorder treatment for fathers. *Journal of Substance Abuse Treatment*, 81, 35–43. [PubMed: 28847453]
- Suchman NE (2016). Mothering from the Inside Out: A mentalization-based therapy for mothers in treatment for drug addiction. *International Journal of Birth and Parent Education*, 3, 19–24. [PubMed: 27840685]
- Suchman NE, Carlone C, & Borelli JL (2017). The Clinical Reflective Functioning Task. Unpublished Document. Yale University School of Medicine.
- Suchman N, DeCoste C, Leigh D, & Borelli J (2010). Reflective functioning in mothers with drug use disorders: Implications for dyadic interactions with infants and toddlers. *Attachment and Human Development*, 12, 567–585. [PubMed: 20931415]
- Suchman NE, DeCoste CL, Dalton R, & Bers S (2016). The Revised MIO/PE Adherence Rating Scale. Unpublished Document. Yale University School of Medicine.
- Suchman NE, DeCoste CL, McMahon TJ, Dalton R, Mayes LC, & Borelli J (2017) Mothering from the Inside Out: Results of a second randomized clinical trial testing a mentalization-based intervention for mothers in addiction treatment. *Development and Psychopathology*, 29, 617–636. [PubMed: 28401850]
- Suchman N, DeCoste C, McMahon T, Rounsaville B, & Mayes L (2011). *The Mothers and Toddlers Program*, an attachment-based parenting intervention for substance-using women: Results at 6-week follow up in a randomized clinical pilot, *Infant Mental Health Journal*, 32, 427–449. [PubMed: 22685361]
- Suchman N, DeCoste C, Ordway M, & Bers S (2013). Mothering from the Inside Out: A mentalization-based individual therapy for mothers with substance use disorders. In N. Suchman, M. Pajulo, & L. Mayes Parenting and substance addiction: Developmental approaches to intervention. pp. 407–433. NY: Oxford University Press.
- Talia A, Muzi L, Lingiardi V, & Taubner S (2018). How to be a secure base: therapists' attachment representations and their link to attunement in psychotherapy. *Attachment and Human Development*, DOI: 10.1080/14616734.2018.1534247
- Tyrell CL, Dozier M, Teague GB, & Fallot RD (1999). Effective treatment relationships for persons with serious psychiatric disorders: The importance of attachment states of mind. *Journal of Consulting and Clinical Psychology*, 67, 725–733. [PubMed: 10535239]
- Weisz JR, Ng MY, & Bearman SK (2014). Odd couple? Reenvisioning the relation between science and practice in the dissemination-implementation era. *Clinical Psychological Science*, 2, 58–74.

Table 1.

Counselor demographic characteristics (n = 15)

	MIO (n = 8)	PE (n = 7)	<i>t</i>	<i>d</i>
	Mean (SD)			
Age	43.40 (15.60)	48.25 (13.19)	.68	.24
Years of service	4.36 (4.99)	7.54 (7.63)	.98	.35
	Percent		χ^2	
Education Level			2.00	
Associates	0.0	12.5		
Bachelors	0.0	0.0		
Masters	87.5	87.5		
Doctorate	12.5	0.0		
Gender	50.0	50.0	0.00	
Ethnicity			1.20	
Caucasian	62.5	62.5		
African American	25.0	37.5		
Mixed Race	0.0	12.5		
African American and Puerto Rican	12.5	0.0		
Native American and Indian	0.0	12.5		
Licensed	66.6	66.6	0.00	

Table 2.

Baseline characteristics of training case mothers and children (n = 15)

	Mean (SD) or Percentage		<i>t</i> / <i>X</i> ₂
	MIO (n=8)	PE (n=7)	
Maternal Characteristics			
Demographic factors			
Age	31.25 (2.96)	28.86 (3.67)	1.40
Education (years)	13.63 (2.00)	12.14 (.90)	1.38
Unemployed	62.50	71.43	.13
Ethnicity			4.04
Caucasian	62.50	75.00	
Hispanic/Latino	00.00	00.00	
African American	00.00	37.50	
Other	14.29	00.00	
Marital status			.94
Never married	37.50	42.86	
Cohabiting or Married	50.00	57.14	
Divorced or Separated	12.50	00.00	
Biological children	2.38 (1.69)	2.00 (.82)	0.54
Minor children in mother's care	2.38 (1.69)	1.57 (.79)	1.15
DCF-involved (current)	12.50	28.57	0.60
Substance use history			
Primary Diagnosis			2.02
Heroin	75.00	100.00	
PCP	25.00	00.00	
Opiate replacement therapy			
Methadone	62.50	85.71	1.03
Buprenorphine with Naloxone	14.29	12.50	0.01
Target Child Characteristics			
Age (months)	33.63 (10.08)	36.43 (18.50)	0.36
Male	62.50	85.71	1.03

Table 3.

Clinical reflective functioning coding scale and examples

RF Level	Criteria	Example
1	Complete disavowal of any affect in the mother and child	<i>This mother feels no emotion toward her child</i>
2	Reference to behaviors from which mental states can be inferred without direct mention of mental states	<i>She 's trying to communicate to her child but it 's not working for her and so she sighs and frowns</i>
3	Simple, generalized, or clichéd reference to mental states	<i>I get that she 's feeling anxious about toilet training right now like most parents do.</i>
4	Mechanical or intellectual reference to mentalizing process	<i>She seems to get that her feelings are affecting her child</i>
5	Direct reference to the nature of mental states and how they work together and/or influence behavior	<i>She seems angry to me and her son may be wondering what he did wrong</i>
6 +	Nuanced, complex references to mental states and behaviors	<i>She seems angry but she may also be feeling scared or I'm feeling anxious that she may not understand why her child is acting that way</i>

Table 4. Examples of clinical RF scores and illustrative excerpts from counselor responses to interview video clips

Pre-Training	MIO Counselor A	Post-Training Case
<p>Overall = 3, Potential = 3</p> <p>“That seems to be an appropriate sort of motherly type feeling. I just wanted to back up about the thinking that her infant wasn’t affected, the awareness of that. It’s encouraging to hear that she passes on her pride and lets her daughter and her children know how she feels. You can feel her disgust. Watching this it would be a hope that maybe she could learn to not feel so disgusted and maybe help. It’s just so visual, that disgust. I think that’s important – self-awareness. I see quite a contrast when she talks about her daughter and when she talks about her son. Physically, verbally, the tone, the expressions, the body language and the facial expressions. It appears that she has thought about the reactions and chaotic behaviors that are happening. She’s thought about how her daughter might feel about it.”</p>	<p>Overall = 4, Potential = 5</p> <p>“Understandably, there are chores to be done but she seems focused on the chore versus what her child is probably feeling when she leaves him. Being at that age, when mommy leaves the room, the whole attachment thing. It appears she knows she has to do things and she’s just focusing on the chores. Maybe she doesn’t have a lot of time to do things and she has to do them during her window of opportunity but she doesn’t seem to be thinking about what he’s thinking. One way of saying this is that she wasn’t mentalizing...It seems very difficult for her to distinguish what may have been emotional for him in any of his crying or his discomfort. She picked up that it was anger, but then there was also the fact that he reached out and she said ‘nope’ and continued to let him be uncomfortable. She mentioned kicking the blanket, so I mean anger. She did pick up on the emotion of anger but she didn’t consider that maybe there might be something else besides the anger. Another emotion. It sounds like there’s a lack of developmental knowledge on her part as far as what a one-year-old wants or needs. She seems to just have a clear point that they just want what they want. But what is it? I don’t know that she’s aware. I think he’s just going nuts demonstrating and that it might be beneficial to understand developmental stages in this little boy’s life. It would probably be really beneficial for her to learn more about what happens with her son at that age rather than thinking of him as just being uncooperative.”</p>	
<p>Overall = 2, Potential = 3</p> <p>“I get the feeling that this relationship at home is a lot of struggles. With just being a parent and understanding what children do, this is like a normal flow of things for children, this is how children respond to things and just being very short, impulsive, and yelling. I just see her pacing around the room or something, just walking back and forth, yelling, throwing things. I think that what happens is people are not aware of the effects that the substance use has and not taking care of yourself and all these things impact children. Her frustration with him, I feel, is her frustration with herself because she doesn’t know how much you contribute to him. He may have ADHD or something like that where, then you’re getting frustrated with these things. That may have contributed from your substance use or there could be any number of things. I think that’s what – the self-forgiveness for that too. Because you have to forgive yourself for what you have done. She talked about the other two children being on methadone, so they came into the world experiencing withdrawal symptoms and stuff like that. So, there’s a lot of things that could’ve gone wrong as a result if she was still using while she was pregnant. So I think about that.”</p>	<p>MIO Counselor B</p> <p>Overall = 4, Potential = 6</p> <p>“I don’t think that she thinks that he’s really capable of emotional stuff like that yet, like really feeling like a deep emotion – that he’s upset that she has left him. She blocks it out herself because if she thinks about it, she knows that it’ll make her feel some guilt, like guilty about doing what she has to do. So she does what she has to do. She’s really struggling, trying to comprehend that someone who is one year and four months old can feel those kinds of emotions. She’s kind of searching, trying to figure it out. She cannot notice when he’s angry, she can see that he is capable of being angry. She reads [his anger] by seeing him kicking and screaming and doing what he does when he’s angry, so she can definitely see that he can be angry. But not sad. So it’s interesting there. Certain emotions she sees him as being capable of, but others she struggles to see how he could be capable of them. If he is being it, she isn’t picking up on it.”</p>	
<p>Overall = 2, Potential = 3</p> <p>“For this mom, it seems like she’s had a very long use history and it sort of reflects on her children that she doesn’t have a way to identify or have a skill for, when things get very difficult or challenging, to find out how to de-escalate it. She’s really focused on the irritability, talking about the exact behavior the child did as opposed to being like ‘Oh, you know, they fight, it happens, it’s typical and I try to separate them, have them get their own space’ or ‘I try to have so and so go and do this instead, we get through it.’ She wasn’t able to see past the behavior of her children.</p>	<p>PE Counselor A</p> <p>Overall = 2, Potential = 3</p> <p>“I feel sad for her. She is very sensitive and really processing a lot, so she’s doing such a good job of realizing what she’s processing. I completely understand how her kids feel, not having a bag of chips and feeling left out. I know how that feels with a child so I have compassion for that. But also, the mom definitely needs a self-esteem booster. Knowing that the kids will still be okay if they don’t have the chips. She needs some motivational techniques to help her. But she’s very low affect, really depressed mood, she seems like she just needs some help kind of navigating it. She seems nice but just really sad.</p>	
<p>Overall = 2, Potential = 3</p>	<p>PE Counselor B</p> <p>Overall = 2, Potential = 3</p>	

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I'm sort of struck by her body language, just thinking that this is uncomfortable to a degree. Also, that it's very relatable in that, you're talking about less than ideal parenting, or you're feeling guilty about how you may have impacted your child. Even just her sort of squimming in her chair is this, you know, non-verbal stuff.

It sounds like she's in a really tough role because she's doing all the nuts and bolts and the heaving lifting. She doesn't get the glory. She definitely short-changes herself. It sounds like she's taking care of two kids on her own. I don't know what kind of supports she has but it sounds like she's doing most of it on her own. She seems very aware. She mentions it herself that she does all the work. She knows this is how much she's doing but she could probably use reassuring and validation for all of the work she's putting in."

Table 6. Analysis of variance testing pre-training differences in Overall and Potential Clinical RF [$n = 15$ (8 MIO, 7 PE)]

Overall Clinical RF		Potential Clinical RF	
Mean (SD)	<i>t</i>	Mean (SD)	<i>t</i>
MIO		MIO	
2.31 (.37)	.75 ^a	3.50 (.46)	3.79 (.91)
PE		PE	
	.37		.98 ^a
	.28		.28

^aEqual variances not assumed

Repeated measures ANOVA and *t* tests for MIO vs PE counselor improvement in Overall and Potential Clinical Reflective Functioning (n = 15)

Table 7.

	MIO (n = 8)				PE (n = 7)				<i>F</i>	Tx X Time	<i>t</i>	Between subjects <i>d</i>
	Mean (SD)		Within subjects		Mean (SD)		Within subjects					
	Pre	Post	<i>t</i>	<i>d</i>	Pre	Post	<i>t</i>	<i>d</i>				
Overall Clinical RF	2.31 (.37)	3.13 (.74)	3.05*	.99	2.57 (.61)	2.50 (.41)	.26	.10	5.28*	1.89 [†]	.74	
Potential Clinical RF	3.50 (.46)	4.63 (1.06)	2.35*	.98	3.79 (.91)	3.71 (.76)	.55	.07	5.11*	2.05 ^{†a}	.71	

^aEqual variances not assumed

[†] $p < .10$,

* $p < .05$