

Outcomes of Motivational Interviewing Training with Probation and Parole Officers: Findings and Lessons Learned

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PROBATION AND PAROLE officers are considered to be “change agents” in that they encourage their clients to comply with the terms of probation or parole and engage in positive life changes (Alexander, VanBenschoten, & Walters, 2008, p. 61). Previous studies have shown that positive working alliances (Blasko & Jeglic, 2016; Kennealy, Skeem, Manchak, & Eno Loudon, 2012) and strength-based interventions (Woldgabreal, Day, & Ward, 2016) can facilitate positive behavior changes, including reduced recidivism rates, among people who have a history of criminal behavior. Therefore, specific methods that foster strong working alliances and capitalize on client strengths can be valuable assets to the probation and parole supervision process. Motivational interviewing (MI) is one evidence-based approach that appears to be a natural fit for delivering such services. MI promotes a working relationship between officer and client that is grounded in the belief that the client is capable of making positive changes and has the autonomy to pursue a specific goal related to behavior change. In this study, parole and probation officers completed training in MI as part of a planned implementation of MI within a state probation and parole agency.

Motivational Interviewing

Since William Miller originated it in 1983, MI has been applied to a diverse range of

helping professions, including mental health counseling, healthcare, and offender rehabilitation. As defined by Miller and Rollnick (2013), “Motivational Interviewing is a collaborative conversation style used to elicit and strengthen a person’s own motivation and commitment to change” (p. 12). The method of MI involves the spirit of MI (partnership; acceptance of the person as a human being including expressions of empathy, autonomy, and affirmation; compassion; and evocation) and strategies to elicit and strengthen the client’s movement toward positive change. Persuasion and pushing clients to see the officer’s point (i.e., arguing) are avoided in MI; instead, the emphasis is on listening and drawing out motivations that are already within the client (Miller & Rollnick, 2013). Consistent with the collaborative nature of MI, the officer elicits the client’s ideas about change so that the client can identify and verbalize his or her intrinsic motivation for change (Miller & Rollnick, 2013). Research has found that when helpers use MI-consistent skills, clients are more likely to respond with change talk, or client statements in favor of change (Moyers & Martin, 2006; Moyers et al., 2007; Moyers et al., 2009). Further, change talk has been found to increase the probability of actual behavior change, especially when combined with statements expressing commitment to change (Amrhein Miller, Yahne, Palmer, & Fulcher, 2003; Moyers, Martin, Christopher, Houck,

Tonigan, & Amrhein, 2007; Moyers, Martin, Houck, Christopher, & Tonigan, 2009).

MI is considered particularly useful with clients who present with lower degrees of motivation or readiness for change. MI was designed for clients who are ambivalent about change or opposed to engaging in relationships with helping professionals. The helper meets the client in his or her current level of readiness to change to avoid evoking discord (known to many by the term resistance) in the relationship between the officer and client, which can ultimately further reinforce the client’s unwillingness to acknowledge a problem. Given that most clients on probation and parole supervision are in early stages of readiness to change, MI is a natural strategy for officers to encourage positive change.

MI in the Criminal Justice System

The historical approach to offender reform has been driven heavily by punishment and confrontation, often creating a culture of “us versus them” between officers and offenders, which can inhibit effective rehabilitation (Ginsburg, Mann, Rotgers, & Weekes, 2002). In contrast, compassion and respectful treatment are hallmarks of MI (Miller, 2013). MI is an evidence-based practice and can help the probation officers focus on behavior changes, as well as preparing officers to diminish resistance, resolve ambivalence toward behavior change (Clark, Walters, Gingerich, & Meltzer,

2006), and help the client discover self-efficacy and autonomy. By using MI, officers focus on eliciting intrinsic motivation and developing discrepancies in a motivational style (Clark et al., 2006). MI focuses on collaborative partnerships between officer and client, instead of coercing individuals into changing. MI promotes uncovering and understanding clients' genuine personal reasons for pursuing change. In this process of eliciting the client's motivation, the officer invites the client to share and then respectfully listens to the client's relevant experiences, perceptions, values, and goals. Such conversations allow clients to feel heard, valued, and engaged in their own process of change.

MI equips probation and parole officers with skills to reduce discord in the relationship with clients, including clients lacking engagement in the change process, feeling defensive, or being oppositional. By diminishing discord, officers create the potential for a meaningful, collaborative conversation about change. By using active listening skills that are essential to MI practice, officers develop an interpersonal environment that fosters rapport and effective supervision (Bogue & Nandi, 2012).

MI has shown strong evidence in reducing substance use, which tends to be prevalent amongst offender populations (Alexander et al., 2008; Antiss, Polaschek, & Wilson, 2011; Lundahl, Burke, Tollefson, Kunz, & Browell, 2010; McMurren, 2009). Further, MI has demonstrated positive change with short, direct interactions between practitioner and client, which are common in probation and parole settings (Alexander et al., 2008). MI has also been endorsed in criminal justice settings, because of its cost-effective interventions and adaptable style that can be taught to a variety of professionals (Miller & Rollnick, 2013).

Effectiveness of MI with Offenders

MI is considered effective in enhancing motivation for change leading to positive behavior changes. In addition, MI has produced strong evidence of treatment retention among clients with substance use problems, which tend to be highly prevalent in the offender population (McMurren, 2009). According to the National Institute on Drug Abuse (2014), an estimated 70 percent of state and 64 percent of federal offenders used substances regularly before incarceration. MI has also demonstrated effectiveness in reducing recidivism, increasing readiness to change, and increasing rates of initiating substance use treatment among clients on supervision, especially when officers

delivered MI techniques with fidelity (Austin, Williams, & Kilgour, 2011; McMurren, 2009; Mendel & Hipkins, 2002; Spohr, Taxman, Rodriguez, & Walker, 2016). In a recent study of participants who engaged in binge drinking and had recently committed an intimate partner violence offense, those who received a single MI session attended more subsequent treatment sessions and exhibited a lower percentage of dropout rates compared to those who did not engage in one MI session (Crane, Eckhardt, & Schlauch, 2015). Considering the evidence base supporting using MI with offenders, training probation officers to implement MI techniques with integrity may lead to positive change amongst offender populations.

MI Training with Correctional Staff

Strategies used to train helping professionals in MI include one to three day workshops, practice feedback, clinical supervision (Baer, Wells, Rosengren, Hartzler, Beadnell, & Dunn, 2009; Miller & Rollnick, 2013), experiential activities, computer training, training manuals (Beidas & Kendall, 2010), educational modules (Nesbitt, Murray, & Mensink, 2014), behavioral role play (Lane, Hood, & Rollnick, 2008), and infusion into curriculum via didactic lectures (Madson Schumacher, Noble, & Bonnell, 2013; Martino, Haeseler, Belitsky, Pantaloni, & Fortin, 2007). The strategies often found to be most effective include workshops, manuals, and active learning opportunities, such as modeling and clinical supervision (Beidas & Kendall, 2010). However, without follow-up components (e.g., practice feedback, coaching), skills acquired in an initial training (e.g., workshop) have been found to diminish over time (Miller & Mount, 2001; Miller et al., 2004; Schwalbe, Oh, & Zweben, 2014).

Previous studies have evaluated the effectiveness of MI training among probation and parole officers. For example, Walters, Vader, Nguyen, Harris, and Eells (2010) trained 20 probation officers who volunteered for MI training, which included a two-day workshop, a half-day "booster" training, and up to two practice feedback meetings, and found the training improved officers' skills. However, this study was conducted with officers who volunteered for the training, and information is lacking on training effectiveness with adult probation officers who are required to complete MI training. In juvenile corrections, Hohman, Doran, and Koutsenok (2009) investigated the effectiveness of three

days of MI training with juvenile correctional staff and found it to be effective in enhancing trainees' MI knowledge and skills. This study also indicated that trainees' motivation to learn MI was not related to training outcomes. With the same trainees, Doran, Hohman, and Koutsenok (2011) found that a two-day advanced training following the initial three-day training advanced trainees' skill further, with the most improvement resulting from the least amount of time lapsing in between trainings.

From their findings, researchers of MI training research derive the following suggestions for successful MI trainings (Alexander et al., 2008; Miller & Rollnick, 2013; Bogue & Nandi, 2012): (a) offering initial learning (e.g., workshop) as well as practice feedback, (b) incorporating the eight stages of learning MI (Miller & Moyers, 2006), (c) using a MI trainer who has completed required training recommended by Motivational Interviewing Network of Trainers (MINT), (d) having one or two individuals on staff to help others learn MI, and (e) providing periodic and objective feedback for the staff and the program with evaluations. Despite these guidelines, more evidence is needed to inform successful implementation of MI in correctional services (Forsberg, Ernst, Sundqvist, & Farbring, 2011).

Method

The current study investigated within and between group differences in MI knowledge, confidence, and skills among probation and parole officers who completed MI training required by their state agency. Research questions were as follows: 1) Do MI training workshops significantly impact probation and parole officers' knowledge and understanding of MI? 2) Do MI training workshops significantly impact probation and parole officers' self-efficacy to help their clients make positive behavior changes? 3) Do MI training workshops significantly impact probation and parole officers' self-report of using techniques consistent with MI? 4) Do MI training workshops significantly impact probation and parole officers' ability to demonstrate skills that are consistent with MI? and 5) Are there significant differences between the three training groups on pre-scores, post-scores, or changes in scores from pre- to post-tests?

Procedure

Trainees were selected by a state agency to participate in mandatory MI training.

This study was approved by the Institutional Review Board prior to data collection. Before and after each training, trainees received an envelope that contained the information letter and the data collection instruments. Trainees were informed this was for research purposes and was voluntary. Group A was provided with a third envelope four months after the initial training when they met for the coaches training. Participants used codes to link their pre- and post-tests without identifying them.

Participants

Participants in Group A ($N=28$) included district managers ($N=5$), senior officers ($N=19$), and others who did not report their position ($N=4$). Groups B ($N=18$) and C ($N=21$) comprised probation and parole officers. Of the participants who completed the demographic form ($N=59$), 76 percent were male and 22 percent were female (1.5 percent did not disclose), 32 percent identified as African American, 62 percent as white, and 3 percent as Hispanic. Participants ranged in age from 23-60 with an average age of 42. Participants reported they had been working in their positions for an average of 7 years and working with offenders for an average of 11 years. Approximately 71 percent of participants had a Bachelor's degree and 29 percent had a Master's degree. Majority of participants ($N=50$; 84.75 percent) reported no previous MI training, two (3.39 percent) participants reported 1-2 hours of previous training in MI, three (5.08 percent) endorsed 3-5 hours, one indicated 5-10 hours, two (3.39 percent) indicated 11-15 hours, and one (1.69 percent) reported 16-20 hours of previous MI training.

Trainings

All trainings were conducted by the same trainer (first author), who is a member of the Motivational Interviewing Network of Trainers. Workshop format included didactic learning followed by a demonstration. Trainees then practiced the skills in small groups and received feedback from the trainer. Group A completed 21-hour training workshop and then submitted audio-recordings of their use of MI to receive follow-up practice feedback. The trainer provided written practice feedback using Motivational Interviewing Treatment Integrity manual (MITI 3.1.1; Moyers, Martin, Manuel, Miller, & Ernst, 2010), and invited the trainee to participate in a coaching session via telephone. Eleven (34 percent) participants submitted tapes to the trainer and received written

feedback. The number of tapes submitted ranged from one to nine. Of those 11 participants, seven also engaged in a telephone coaching session with the trainer.

Group A completed a five-hour coaches training approximately four months after their initial training. They were then assigned as coaches to officers in Groups B and C. Groups B and C completed 15-hour training workshops with the trainer.

Instruments

MI Knowledge Test. Participant's knowledge of MI was measured using the Motivational Interviewing Knowledge and Attitudes Test (MIKAT) modified from Leffingwell (2006). The MIKAT contains two sections with 14 true/false questions and a checklist. The true/false questions assess commonly held beliefs that are contrary to the beliefs of MI, while the checklist measures understanding of the principals of MI. The MIKAT was administered before and after training to measure changes in participants' knowledge of MI.

Self-Efficacy Questionnaire. Evangeli's (2009) confidence questions (CQ) measured participants' confidence in their ability to increase offenders' motivation to alter behaviors in the areas of improving self-control, changing criminal thinking, learning and using healthy coping skills, exploring values, setting goals, academic success, and gaining employment. Participants were asked to specify how they align with the provided statement, "I am confident that I can increase offenders' level of motivation regarding..." using a five-point Likert scale. The questionnaire was administered before and after training to measure the change in participants' confidence in their abilities to increase student motivation.

MI Techniques Questionnaire. To assess the MI techniques implemented by participants, a version of Evangeli's (2009) techniques questionnaire (TQ) was administered. Participants ranked the frequency with which they used MI techniques using a five-point Likert scale. Techniques listed on the questionnaire focus on various MI techniques that increase behavior change (e.g., discussion about behavior change, using summaries, ensuring choice, and acknowledging challenges of change). Assessments were completed before and after participants' trainings to measure changes in techniques used to help clients increase motivation.

Officer Responses Questionnaire. The Officer Response Questionnaire (ORQ) was

developed by Walters, Alexander, and Vader (2008) to assess the trainees' ability to respond empathically using MI techniques. The questionnaire provides sample client statements (e.g., "I've been looking for work, but it's impossible for someone on probation to find a good job"), then the participant provided a response of what the officer would say to be supportive to the offender (e.g., "You have been working for a job, but it has been difficult."). Statements were rated from 1 to 5, with 5 meaning demonstration of effective MI techniques (Walters et al., 2008).

MI Practice. For the 11 (39 percent) trainees who submitted recordings of their use of MI with clients, the trainer used the Motivational Interviewing Treatment Integrity (MITI 3.1.1; Moyers et al., 2010) to determine the level of MI competency attained by trainees. The MITI is a behavioral coding system that provides benchmark scores for "beginning proficiency" and "competency." The MITI consists of two main components: global scores and behavior counts. The global scores are each evaluated on a five-point scale and include five dimensions: evocation, collaboration, autonomy/support, direction, and empathy. Behavioral counts are tallied and include seven categories: giving information, open questions, closed questions, MI-adherent, MI non-adherent, and simple and complex reflections. As recommended by Moyers et al. (2010), random 20-minute segments of officers' conversations with clients were evaluated; however, the majority of conversations were under 20 minutes.

Results

Nonparametric tests were run to test the hypotheses of this study. Assumptions required for parametric tests were not met, often due to outliers in the data, and we chose to maintain the outliers in the data and run nonparametric tests to preserve the integrity of the study. Findings reported below respond to each of the five research questions. Table 1 shows all median scores.

MI Knowledge

A Friedman test was run to determine if there were differences in Group A's knowledge of MI over the course of MI training (pre, post, and 4-month). Scores on the MIKAT stayed the same from before the workshop ($Mdn = 57$), to after the workshop ($Mdn = 57$), and increased at follow-up ($Mdn = 61$). However, these differences were not statistically significant, $\chi^2(2) = 4.854, p = .088$.

TABLE 1
Pretest and Posttest Medians, Analyses, and Findings

Variable	Group	Pre	Post	4mo	Analysis	Results
MI Knowledge (Multiple choice % Correct)	A	57	57	61	Friedman test	$\chi^2(2) = 4.854, p = .088$
	B	57	64	—	Wilcoxon Signed Rank	$z = -2.083, p < .005^*$
	C	57	64	—	Wilcoxon Signed Rank	$z = -2.083, p < .005^*$
MI Knowledge (# MI-Consistent Behaviors)	A	2	4	6	Friedman test	$\chi^2(2) = 32.771, p < .0005^{**}$
	B	2.5	4	—	Wilcoxon Signed Rank	$z = -3.622, p < .0005^*$
	C	2	4	—	Wilcoxon Signed Rank	$z = -3.559, p < .0005^*$
Confidence	A	46	46	44	Friedman test	$\chi^2(2) = 1.486, p = .476$
	B	44.5	52	—	Wilcoxon Signed Rank	$z = -3.011, p < .005^*$
	C	45	51	—	Wilcoxon Signed Rank	$z = -2.310, p < .05^*$
MI Techniques Used	A	37	37	39	One-way RM ANOVA	$F(2, 36) = 1.142, p = 0.330$
MI Skills	A	1.2	2.8	2.4	Friedman test	$\chi^2(2) = 11.485, p < .003^{***}$
	B	1.0	2.6	—	Wilcoxon Signed Rank	$z = -3.147, p < .005^*$
	C	1.0	3.0	—	Wilcoxon Signed Rank	$z = -3.413, p < .005^*$

Note: *Statistically significant difference was detected. **Statistically significant difference was detected. Pairwise comparisons with a Bonferroni correction for multiple comparisons; the number of MI-consistent behaviors correctly selected was statistically significantly different between pre- and post-workshop scores ($p < .0005$) and pre-workshop to follow-up scores ($p < .0005$). ***Pairwise comparisons were used with a Bonferroni correction for multiple comparisons. Group A's MI skills were significantly different between pre- and post-workshop ($p < .006$) and pre-workshop to follow-up ($p < .047$).

Significant differences were detected in the number of MI-consistent behaviors selected in that median scores increased from two correctly identified behaviors pre-workshop to four post-workshop to six at follow-up $\chi^2(2) = 32.771, p < .0005$. Pairwise comparisons were performed with a Bonferroni correction for multiple comparisons. The number of MI-consistent behaviors correctly selected was statistically significantly different between pre- and post-workshop scores ($p < .0005$) and pre-workshop to follow-up scores ($p < .0005$). There were also significant differences detected in the number of MI-inconsistent behaviors incorrectly selected in that median scores decreased from five MI-inconsistent behaviors incorrectly selected pre-workshop to two post-workshop, and then to three at follow-up $\chi^2(2) = 21.493, p < .0005$. Pairwise comparisons were performed with a Bonferroni correction for multiple comparisons. MI-inconsistent behaviors incorrectly selected scores were statistically significantly different between pre- and post-workshop ($p < .0005$) and pre-workshop to follow-up ($p < .034$).

Wilcoxon Signed Rank Tests were run to determine if there were differences in Group B and C's knowledge of MI from pre to post MI training. The training elicited a statistically significant median increase in MI knowledge for Group B and C, $z = -2.083, p < .005$. MI-consistent behaviors correctly

selected were statistically significantly different between pre- and post-workshop for Groups B and C ($z = -3.622, p < .0005$; $z = -3.559, p < .0005$ respectively), and significant differences were also detected in the number of MI-inconsistent behaviors incorrectly selected for both groups ($z = -3.655, p < .0005$; $z = -3.277, p < .005$).

Self-Efficacy

A Friedman test was run to determine if there were differences in Group A's self-efficacy in using MI techniques over the course of MI training (pre-workshop, post-workshop, and at a 4-month follow-up). Self-efficacy scores remained the same before and after the workshop ($Mdn = 46$), but then decreased at follow-up ($Mdn = 44$). These differences were not statistically significant, $\chi^2(2) = 1.486, p = .476$. Wilcoxon Signed Rank Tests were run to determine if there were differences in Group B and C's self-efficacy in using MI techniques over the course of MI training. The training elicited a statistically significant median increase in self-efficacy to use MI techniques for Group B, $z = -3.011, p < .005$ and for Group C, $z = -2.310, p < .05$.

MI-Consistent Techniques

Changes in probation and parole officers' self-report of using techniques consistent with MI were only tested for Group A, because they had a 4-month follow-up assessment to determine

if techniques changed, whereas Groups B and C only had pre- and post-assessments from a training that was two consecutive days and therefore did not allow them time to change their techniques between assessments. A one-way repeated measures ANOVA with Bonferroni post hoc test was conducted with Group A to determine whether there were statistically significant differences in trainees' self-reported use of MI techniques over the course of MI training (pre-workshop, post-workshop, and 4-month follow-up). There was one outlier, which was reduced by two points, and the data was normally distributed at each time point, as assessed by boxplot and Shapiro-Wilk test ($p > .05$), respectively. The assumption of sphericity was met, as assessed by Mauchly's test of sphericity, $\chi^2(2) = 2.209, p = .331$. Findings showed that the training did not lead to any statistically significant changes in self-reported use of MI techniques, $F(2, 36) = 1.142, p = 0.330$.

MI Skills

A Friedman test was run to determine if there were differences in Group A's ability to produce MI-consistent responses over the course of MI training (pre-workshop, post-workshop, and 4-month follow-up) as measured by responses on the ORQ. Statistically significant differences were detected in Group A's demonstrations of MI skills $\chi^2(2) = 11.485, p < .003$. Pairwise comparisons were used with a

Bonferroni correction for multiple comparisons. Group A's MI skills were significantly different between pre- and post-workshop ($p < .006$) and pre-workshop to follow-up ($p < .047$). Wilcoxon Signed Rank Tests were run to determine if there were significant differences in Group B and C's demonstrations of MI skills before and after training. The training elicited a statistically significant median increase in MI skills for Group B, $z = -3.147$, $p < .005$, and for Group C, $z = -3.413$, $p < .005$.

Between-Group Differences

A Kruskal-Wallis H test was run to determine if there were differences in trainees pre- and post-scores between the three groups of participants. Distributions of all dependent variable scores were similar for all groups, as assessed by visual inspection of a boxplot. Median scores were not statistically significantly different between groups on any of the pre-training tests: Self-Efficacy, $H(2) = .426$, $p = .808$; Reported use of MI-Consistent Techniques, $H(2) = 3.274$, $p = .195$; MI Knowledge Percent Correct, $H(2) = 2.369$, $p = .306$; MI-Consistent Behaviors Selected Correctly, $H(2) = 3.904$, $p = .142$, and Number of MI-Inconsistent Behaviors Selected Incorrectly $H(2) = 4.273$, $p = .118$; and MI Skills, $H(2) = .089$, $p = .956$.

When examining post-scores, self-efficacy post-scores were significantly different between groups, $H(2) = 10.157$, $p = .006$. Subsequently, pairwise comparisons were performed using Dunn's (1964) procedure with a Bonferroni correction for multiple comparisons (adjusted p-values are presented). This post hoc analysis revealed statistically significant differences in self-efficacy post-scores between Group A ($Mdn = 46$) and Group B ($Mdn = 52$) ($p = .006$). Reported use of MI-consistent techniques was not tested for differences between groups due to trainees having no time between pre- and post-tests to adjust their practice. All other post-scores were not significantly different between groups: MI Knowledge Percent Correct, $H(2) = 4.096$, $p = .129$; MI-Consistent Behaviors Selected Correctly, $H(2) = 3.376$, $p = .185$, and Number of MI-Inconsistent Behaviors Selected Incorrectly $H(2) = 2.558$, $p = .278$; and MI Skills, $H(2) = 1.135$, $p = .567$.

When examining group differences in changes in scores from pre- to post-tests, we found self-efficacy significantly different between groups $H(2) = 7.143$, $p = .028$. Pairwise comparisons post hoc analysis revealed significant differences in self-efficacy

TABLE 2
Group A's Scores on the MITI After Completing a 3-Day Training

	Below Beginning Proficiency	Beginning Proficiency	Competency
Average Global	18.2% (2)	9.1% (1)	72.7% (8)
Open Questions	36.4% (4)	45.5% (5)	18.2% (2)
Complex Reflections	27.3% (3)	9.1% (1)	63.6% (7)
MI Adherent	9.1% (1)	0.0% (0)	90.9% (10)
Reflection-to-Question Ratio	63.6% (7)	9.1% (1)	27.3% (3)

Note: $N = 11$. According to the MITI 3.1.1, for the MI spirit the benchmark for beginning proficiency is 3.5 and 4.0 for competence. For open questions, below proficiency is <50%; beginning proficiency 50%-69%; and competency is 70% and above of total questions asked. For complex reflections, below proficiency is <40%; beginning proficiency is 40%-49%; and competency is 50% and above of total reflections made. For MI-adherent behaviors, below proficiency is <90%; beginning proficiency 90%-99%; and competency is 100% of total MI adherent and MI non-adherent behaviors. For reflection-to-question ratio, below proficiency is <1.00; beginning proficiency 1.00-1.99; and competency is 2.00.

change scores between Group A ($Mdn = 1$) and Group B ($Mdn = 5.5$) ($p = .043$). All other change scores were not significantly different between groups: MI Knowledge Percent Correct, $H(2) = 2.265$, $p = .322$; MI-Consistent Behaviors Selected Correctly, $H(2) = 2.307$, $p = .315$, and Number of MI-Consistent Behaviors Selected Incorrectly $H(2) = 1.416$, $p = .493$; and MI Skills, $H(2) = 3.051$, $p = .218$.

MI Practice

Scores on the MITI showed that the majority of participants scored in a competency range for global scores, complex reflections, and MI adherent skills. Trainees scored below competency for percent open questions and reflection-to-question ratio. A summary of scores is presented in Table 2.

Discussion

Results of this study suggest that the MI training workshops were largely successful in increasing officers' MI knowledge, skill, and self-efficacy in using MI, despite the trainings being with officers who did not volunteer for to complete training. Improvements related to MI knowledge were variable on the multiple choice scores; however, trainees' abilities to correctly choose behaviors that were consistent with MI improved consistently across groups. It is notable that trainees who completed two days of training (Groups B and C) scored higher in MI knowledge in their post-test compared to the leadership group (Group A), who completed three days of initial training. In addition to knowing about MI, trainees in each of the groups demonstrated significant improvements in their ability to demonstrate MI-consistent skills as measured on the Officer Response Questionnaire. This finding is promising, as the ultimate hope is

for trainees to execute the MI approach with offenders to assist them in making lasting changes to avoid future incarceration or other involvement in the criminal justice system. This hope was reinforced by the finding from Group A's practice feedback showing gains in global scores, complex reflections, and MI adherent skills. These findings also suggest that trainees need more practice to ask more open questions and reflections compared to closed questions. Finally, Groups B and C demonstrated significant improvement in self-efficacy scores, suggesting they felt capable and confident in their abilities to execute MI with individuals who are on probation or parole. Self-efficacy was the only variable that was significantly different between groups in that the post-tests and change scores were significantly higher in Group B compared to A.

Limitations

This study was conducted in collaboration with one probation/parole state agency, and it includes data from officers who were selected by the agency to participate in these trainings. Therefore, randomization was not possible. Unanticipated challenges in accessing recordings of trainees' use of MI resulted in only 39 percent of trainees submitting tapes, and they varied regarding the number of tapes submitted. Therefore, the amount and frequency of practice feedback provided to trainees was inconsistent. There was insufficient data to run analysis on those who engaged in telephone coaching and those who did not, which was an intended aim of this study.

Implications and Lessons Learned

The findings of this study should be understood in the context that trainees did not volunteer to partake in these trainings.

Trainees presented to trainings with a range of degrees of readiness to learn about and to implement MI, and, therefore, assessing and considering trainees motivation and attitudes toward MI training would be beneficial when interpreting the effectiveness of such trainings. For example, Doran et al. (2011) used a two-item *Quick Readiness Measure* to assess trainees' motivation to use MI and their beliefs about its usefulness, but the authors did not find that trainees' motivation to use MI impacted their MI skills. We recommend that future trainings with mandated trainees include a more comprehensive assessment of trainees' attitudes toward learning MI and integrating it into practice, such as an adaptation of the *Readiness to Change Questionnaire-Clinical Skills Adaptation* and the *What I Want From Training* instrument (Barrick & Homish, 2011). In addition, based on the findings of this study, it appears that additional time in trainings to deconstruct current practice habits inconsistent with MI (e.g., asking closed questions) is necessary.

Implementation strategies can be identified and incorporated to enhance the adoption, implementation, and sustainability of MI among probation and parole agencies (Proctor et al., 2011). Several strategies identified by Powell et al. (2012) were included in this training design, including the trainer's meetings and frequent communication with the director of training to develop strategies and relationships and solidify buy-in. Alexander et al. (2008) suggested providing education before the trainings, such as a two-hour introduction to evidence-based practices. The value of such a strategy was evident in the current trainings when most trainees in Group A were not familiar with MI upon their arrival to the training. Providing information about the approach and evidence supporting its use can help develop trainee buy-in prior to arriving for the training.

In the spirit of a strategy Powell (2012) referred to as identifying and preparing champions, the trainer encouraged the leadership group (Group A) to complete a coaches training and engage peer learning communities to help them develop their MI skills further and to be able to assist officers in developing their MI skills. The officers in this study engaged in the 5-hour coaches training, but did not develop peer learning communities as recommended. Unfortunately, out of the three groups trained, the leadership group anecdotally appeared to be the most reluctant to adopt MI, and although gains occurred during the

3-day training, challenges emerged when the agency's technological difficulties impeded training. The tone from trainees was that the demands from the agency on the officers were high, and yet the (technological) support was not in place for them to be successful. This resulted in lost momentum and negative attitudes, which likely influenced subsequent trainees' attitudes toward the trainings (Bogue & Nandi, 2012) and Groups B and C failing to receive consistent practice feedback from Group A as planned. Thus, it might be beneficial to discuss and even complete a trial run of providing post-workshop practice feedback prior to attempting this with trainees.

Offering incentives after the workshop to incorporate feedback provided could also be a useful strategy (Powell, 2012), especially to balance the already heavy weight officers feel from managing large caseloads and being asked to do "another thing" in learning and implementing MI. For example, officers might receive monetary or other incentives if they demonstrate MI competency or improvements over time. Incentives might also be beneficial for champions who develop and engage in peer communities focused on the use of MI.

A final lesson learned involved the instrument used to provide feedback to the members of Group A who submitted recordings. They were exposed to the MITI in the training workshop, and this was the instrument used to provide practice feedback following the workshop to those who were able to successfully implement recordings. However, trainees reported that the MITI was overly complex. In the coaches training, we changed instruments to the Behavior Change Counseling Index (BECCI) – Criminal Justice Version (Lane, 2002), an instrument that provides practice feedback on a Likert scale and that was specifically designed for criminal justice settings. The coaches decided to use this instrument when providing feedback to officers in Groups B and C on their use of MI.

Future Research

MI training and dissemination in probation settings is still a rich area for research. Future research is needed to capture the effectiveness of practice feedback after the initial training. Outcome data about specific implementation strategies, such as education prior to training workshops and offering incentives for implementing MI and for engaging in learning communities, are also needed to better understand which strategies result in

officers using MI with greater fidelity after an initial training.

Conclusion

With its humanistic base and strategies that emphasize client autonomy and promoting lasting changes, MI in correctional settings appears to be a natural fit. In this study, we learned that MI training can be mostly successful when officers are mandated to training. However, recommendations for improving such trainings from implementation research will likely enhance the effectiveness of such trainings. Future research is needed to further inform training and implementation practices.

References

- Alexander, M., VanBenschoten, S. W., Walters, S. T. (2008). Motivational interviewing training in criminal justice: Development of a model plan. *Federal Probation, 72*(2), 61-66.
- Anstiss B., Polaschek, D. L. L., & Wilson, M. (2011) A brief motivational interviewing intervention with prisoners: When you lead a horse to water, can it drink for itself? *Psychology, Crime & Law, 17*, 689-710, DOI: 10.1080/10683160903524325
- Amrhein, P. C., Miller, W. R., Yahne, C. E., Palmer, M., & Fulcher, L. (2003). Client commitment language during motivational interviewing predicts drug use outcomes. *Journal of Consulting and Clinical Psychology, 71*, 862-878. doi:10.1037/0022-006X.71.5.862
- Austin, K. P., Williams, M. W. M., & Kilgour, G. (2011). The effectiveness of motivational interviewing with offenders: An outcome evaluation. *New Zealand Journal of Psychology, 40*, 55-67.
- Baer, J. S., Wells, E. A., Rosengren, D. B., Hartzler, B., Beadnell, B., & Dunn, C. (2009). Agency context and tailored training in technology transfer: A pilot evaluation of motivational interviewing training for community counselors. *Journal of Substance Abuse Treatment, 37*, 191-202.
- Barrick, C., & Homish, G. G. (2011). Readiness to change and training expectations prior to a training workshop for substance abuse clinicians. *Substance Use & Misuse, 46*, 1032-1036.
- Beidas, R. S., & Kendall, P. C. (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. doi: 10.1111/j.1468-2850.2009.01187.x
- Blasko, B. L., & Jeglic, E. L. (2016). Sexual offenders' perceptions of the client-therapist

- relationship: The role of risk. *Sexual Abuse: Journal of Research and Treatment*, 28, 271-290. doi:10.1177/1079063214529802
- Bogue, B., & Nandi, A. (2012). *Motivational interviewing in corrections: A comprehensive guide to implementing MI in corrections* (NIC Accession No. 025556). Retrieved from <http://nicic.gov/Library/files/025556.pdf>
- Clark, M. D., Walters, S., Gingerich, R., & Meltzer, M. (2006). Motivational interviewing for probation officers: Tipping the balance toward change. *Federal Probation*, 70(1), 38-44.
- Crane, C. A., Eckhardt, C. I., & Schlauch, R. C. (2015). Motivational enhancement mitigates the effects of problematic alcohol use on treatment compliance among partner violent offenders: Results of a randomized clinical trial. *Journal of Consulting and Clinical Psychology*, 83, 689-695. doi:10.1037/a0039345
- Doran, N., Hohman, M., & Koutsenok, I. (2011). Linking basic and advanced motivational interviewing training outcomes for juvenile correctional staff in California. *Journal of Psychoactive Drugs*, 43, 19-26.
- Evangeli, M. (2009). An evaluation of a brief motivational interviewing training course for HIV/AIDS counselors in Western Cape Province, South Africa. *AIDS Care*, 21, 189-196.
- Forsberg, L. G., Ernst, D., Sundqvist, K., & Farbring, C. Å. (2011). Motivational interviewing delivered by existing prison staff: A randomized controlled study of effectiveness on substance use after release. *Substance Use & Misuse*, 46(12), 1477-1485. doi.org/10.3109/10826084.2011.591880
- Ginsburg, J. I. D., Mann, R. E., Rotgers, F., & Weekes, J. R. (2002). *Motivational interviewing: Preparing people for change* (pp. 333-346). New York, NY: The Guilford Press.
- Hohman, M., Doran, N., & Koutsenok, I. (2009). Motivational interviewing training for juvenile correctional staff in California: One year initial outcomes. *Journal of Offender Rehabilitation*, 48, 635-648.
- Kennealy, P. J., Skeem, J. L., Manchak, S. M., & Eno Loudon, J. (2012). Firm, fair, and caring officer-offender relationships protect against supervision failure. *Law and Human Behavior*, 36, 496-505. doi:10.1037/h0093935
- Lane, C., Hood, K., & Rollnick, S. (2008). Teaching motivational interviewing: Using role play is as effective as using simulated patients. *Medical Education*, 42, 637-644. doi:10.1111/j.1365-2923.2007.02990.x
- Lane, C. (2002). Behavior Change Counseling Index. Retrieved from motivationalinterviewing.org/sites/default/files/BECCIForm.pdf
- Leffingwell, T. R. (2006). Motivational Interviewing Knowledge and Attitudes Test (MI-KAT) for evaluation of training outcomes. *MINUET*, 13, 10-11.
- Lundahl, B., Burke, B. L., Tollefson, D. R., Kunz, C., & Browell, C. (2010). A meta-analysis of motivational interviewing: Twenty five years of empirical studies. *Research on Social Work Practice*, 20, 137-160.
- Madson, M. B., Schumacher, J. A., Noble, J. J., & Bonnell, M. A. (2013). Teaching motivational interviewing to undergraduates: Evaluation of three approaches. *Teaching of Psychology*, 40, 242-245.
- Martino, S., Haeseler, F., Belitsky, R., Pantalon, M., & Fortin, A. (2007). Teaching brief motivational interviewing to year three medical students. *Medical Education*, 41, 160-167.
- McMurrin, M. (2009). Motivational interviewing with offenders: A systematic review. *Legal and Criminological Psychology*, 14, 83-100. doi:10.1348/135532508X278326
- Mendel, E., & Hipkins, J. (2002). Motivating learning disabled offenders with alcohol-related problems: A pilot study. *British Journal of Learning Disabilities*, 30, 153-158.
- Miller, W. R. (1983). Motivational interviewing with problem drinkers. *Behavioural psychotherapy*, 11, 147-172.
- Miller, W. R. (2013). Motivational interviewing and social justice. *Motivational Interviewing Training, Research, Implementation, and Practice*, 1, 15-18. doi:10.5195/mitrip.2013.32
- Miller, W. R., & Mount, K. A. (2001). A small study of training in motivational interviewing: Does one workshop change clinician and client behavior? *Behavioural and Cognitive Psychotherapy*, 29, 457-471.
- Miller, W. R., & Moyers, T. B. (2006). Eight stages in learning motivational interviewing. *Journal of Teaching in the Addictions*, 5(1), 3-17.
- Miller, W. R., & Rollnick, S. (2013). *Motivational interviewing: Helping people change* (3rd ed.). New York, NY: The Guilford Press.
- Miller, W. R., Yahne, C. E., Moyers, T. B., Martinez, J., & Pirritano, M. (2004). A randomized trial of methods to help clinicians learn motivational interviewing. *Journal of Consulting and Clinical Psychology*, 72(6), 1050-1062. doi.org/10.1037/0022-006X.72.6.1050
- Moyers, T. B., & Martin, T. (2006). Therapist influence on client language during motivational interviewing sessions. *Journal of Substance Abuse Treatment*, 30, 245-251.
- Moyers, T. B., Martin, T., Houck, J. M., Christopher, P. J., & Tonigan, J. S. (2009). From in-session behaviors to drinking outcomes: A causal chain for motivational interviewing. *Journal of Consulting and Clinical Psychology*, 77, 1113-24. doi: 10.1037/a0017189
- Moyers, T. B., Martin, T., Christopher, P. J., Houck, J. M., Tonigan, J. S., & Amrhein, P. C. (2007). Client language as a mediator of motivational interviewing efficacy: Where is the evidence? *Alcoholism: Clinical and Experimental Research*, 31, 40-47.
- Moyers, T. B., Martin, T., Manuel, J. K., Miller, W. R., & Ernst, D. (2010, January). *Motivational Interviewing Treatment Integrity 3.1.1*. Retrieved http://casaa.unm.edu/download/miti3_1.pdf
- National Institute on Drug Abuse. (2014). *Drug addiction treatment in criminal justice system*. Retrieved from: <https://www.drugabuse.gov/related-topics/criminal-justice/drug-addiction-treatment-in-criminal-justice-system>
- Nesbitt, B. J., Murray, D. A., & Mensink, A. R. (2014). Teaching motivational interviewing to nurse practitioner students: A pilot study. *Journal of the American Association of Nurse Practitioners*, 26, 131-135. doi:10.1002/2327-6924.12041
- Powell, B. J., McMillen, J. C., Proctor, E. K., Carpenter, C. R., Griffey, R. T., Bunger, A. C., & ... York, J. L. (2012). A compilation of strategies for implementing clinical innovations in health and mental health. *Medical Care Research and Review*, 69, 123-157. doi:10.1177/1077558711430690
- Proctor, E., Silmere, H., Raghavan, R., Hovmand, P., Aarons, G., Bunger, A., & ... Hensley, M. (2011). Outcomes for implementation research: Conceptual distinctions, measurement challenges, and research agenda. *Administration and Policy in Mental Health And Mental Health Services Research*, 38(2), 65-76. doi:10.1007/s10488-010-0319-7
- Schwalbe, C. S., Oh, H. Y., & Zweben, A. (2014). Sustaining motivational interviewing: A meta-analysis of training studies. *Addiction*, 109(8), 1287-1294
- Spohr, S. A., Taxman, F. S., Rodriguez, M., & Walters, S. T. (2016). Motivational interviewing fidelity in a community corrections setting: Treatment initiation and subsequent drug use. *Journal of Substance Abuse Treatment*, 65, 20-25. doi.org/10.1016/j.jsat.2015.07.012
- Walters, S. T., Alexander, M., & Vader, A. M. (2008). The Officer Responses Questionnaire: A procedure for measuring reflective listening in probation and parole setting. *Federal Probation*, 72(2), 67-70.
- Walters, S. T., Vader, A. M., & Harris, T. R. (2007). A controlled trial of web-based feedback for heavy drinking college students. *Prevention Science*, 8, 83-88.
- Walters, S. T., Vader, A. M., Nguyen, N., Harris, T. R., & Eells, J. (2010). Motivational

interviewing as a supervision strategy in probation: A randomized effectiveness trial. *Journal of Offender Rehabilitation*, 49, 309-323. doi:10.1080/10509674.2010.489455

Woldgabreal, Y., Day, A., & Ward, T. (2016). Linking positive psychology to offender supervision outcomes: The mediating role of psychological flexibility, general

self-efficacy, optimism, and hope. *Criminal Justice and Behavior*, 43, 697-721. doi:10.1177/0093854815620816