Outcomes of Incorporating Motivational Interviewing into Basic Counselor Skills Training

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Abstract
Counselor skill training involves learning to execute techniques and principles that facilitate client change. Incorporating motivational interviewing can provide a framework that emphasizes humanism in addition to preparing students to assist clients who are ambivalent about change or "resistant." In this study, we investigated the degree of MI competency achieved by students when MI was integrated into a counseling skills course. We then examined how MI competency was maintained over time. Findings showed that students achieved competency in executing the MI spirit, and this was largely maintained following subsequent coursework and clinical experiences. Implications include the value of incorporating MI training in a counseling skills course and the need for additional training in MI to maintain gains in competency.

Keywords
motivational interviewing, evidence-based practice, humanism, counselor training, counseling skills

Author's Notes
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Motivational interviewing (MI) is an evidence-based counseling style used to evoke clients’ own motivation for change within an accepting and compassionate counseling relationship (Miller & Rollnick, 2013). Motivational interviewing was initially developed in substance use counseling (Miller, 1983), and has since been found to be effective when applied to a wide range of issues including chronic mental disorders, treatment adherence, problem gambling, smoking cessation, generalized anxiety disorder, and co-occurring mental health and substance use disorders as well as health issues (e.g., diabetes) (Barrowclough et al., 2010; Burke, Arkowitz, & Menchola, 2003; Cleary et al., 2009; Hetteama, Steele, & Miller, 2005; Lundahl et al., 2010; Westra, Arkowitz, & Dozois, 2009). The hallmark components of MI that differentiate this approach from others include its humanistic spirit as well as conceptualizations and methods for diminishing discord in the counseling relationship (i.e., “resistance”) and addressing client ambivalence about change. Such skills are needed among counseling professionals as the majority of clients who present with mental health or substance use issues have been found to enter treatment in early stages of change (i.e., precontemplation or contemplation) (Dozois et al., 2004; Norcross, Krebs, & Prochaska, 2011; O’Hare, 1996).

Counselors are encouraged to use treatments that have empirical support to serve their clients (American Counseling Association, 2014). As such, counselors who implement evidence-based practices (EBPs) and counselor educators who train others in EBPs demonstrate counselor leadership (Hays, Wood, & Smith, 2012). Further, Patel, Hagedorn, and Bai (2013) noted that MI is an EBP that is consistent with the counseling profession in that it builds on Carl Roger’s person-centered skills (e.g., reflective listening, expressing empathy) and it mirrors the values of the counseling profession (e.g., emphasizes client strengths and autonomy, seeks to understand the worldview of the client including his or her cultural context, and the client is seen as the expert).
As the use of culturally sensitive EBPs improves the quality of care provided to clients (La Roche & Christopher, 2009), training counselors in MI can strengthen the counseling profession, as well as promote leadership among counselors as they learn to implement an EBP (Patel et al., 2013). Young and Hagedorn (2012) were the first to investigate the effectiveness of MI training with counseling students. They found that a four-hour MI training offered while students were enrolled in practicum was somewhat successful in enhancing students’ empathic responses and use of MI skills. Research on MI training has noted that MI is complex to learn and often requires in-depth training, including practice feedback (Miller & Mount, 2001; Miller, Yahne, Moyers, Martinez, & Pirritano, 2004; Schumacher, Madson, & Nilsen, 2014). Thus, incorporating MI into a counseling skills course would allow time for students to learn MI, practice the skills, and receive and integrate feedback on their execution of these skills. Further, learning MI in a basic skills course would reinforce humanistic principles as well as equipping students with a method to be able to help clients who are not yet ready to engage in active change. After integrating MI into a basic counseling skills course, we evaluated the level of MI proficiency attained by counselor trainees who completed the course. We then followed six of these students for two subsequent semesters to investigate the stability of their MI skills.

Rationale

The content and practice of MI strongly coincide with the concepts and skills typically included in basic counseling skills courses, including facilitative conditions (i.e., expressing empathy, unconditional positive regard) and counselor skills (i.e., questions, paraphrases, reflective statements, and summarizations) (Whiston & Coker, 2000). Motivational interviewing practice relies on the humanistic principles of empathy and emphasizes eliciting and employing the strengths and wisdom of the client. This is not to say that students only need to learn MI in a
basic counseling skills course, but we propose that MI can provide the following benefits when incorporated into a skills course: 1) Motivational interviewing provides students with a humanistic foundation including how to be responsive to each unique individual, 2) Students are equipped with a humanistic perspective and strategies to manage discord in the therapeutic relationship (i.e., work with “resistant clients”), 3) Motivational interviewing provides students with a framework to help clients who are ambivalent about change, and 4) Motivational interviewing can offer a structured approach to learn basic counseling skills (e.g., questions, reflections, summarizations). Moreover, MI can be used with theory-based treatments (e.g., CBT), to enhance client outcomes (Miller & Rose, 2009).

**Establishing a Humanistic Foundation**

Specific attributes of humanistic counseling have long-standing empirical support. For example, Lambert and Barley (2001) asserted that empathy, warmth, and the therapeutic relationship have the strongest correlation with client outcomes, even compared to the specific treatment method used (30% and 15% respectively). Scholl, McGowan, and Hansen (2012) summarized that the “positive influence of counselor empathy on therapeutic outcomes is one of the most robust findings in the professional counseling literature” (p.7). Further, Norcross and Lambert (2011) asserted that the usefulness of treatment methods is contingent on the therapeutic relationship in which they are employed. Given the evidence supporting humanistic practices, it is assumed that counseling skills courses include a discussion of these humanistic components as well as increasing cognitive complexity toward developing strong empathy skills (Neukrug, Bayne, Dean-Nganga, & Pusateri, 2013). However, there is little to no gauge of the consistency of this training. Motivational interviewing contains an indispensable humanistic “spirit,” that is essential to its practice, and from which counseling skills are employed. The founders of MI have
emphasized the importance of its spirit over techniques (Miller & Rollnick, 2013), illustrating the humanistic nature of this approach.

The MI spirit includes four components: partnership, acceptance, compassion, and evocation. Within client-counselor partnership, collaboration is emphasized in that the counselor is not doing anything “to” the client, but rather he or she is working “with” the client. Further, the client is considered the “expert” on his or her own life (Miller & Rollnick, 2013, p. 15). Acceptance is an extension of Rogers’s (1957) unconditional positive regard. This component is further deconstructed into absolute worth, accurate empathy, autonomy, and affirmation (Miller & Rollnick, 2013). Concerning absolute worth, MI practitioners recognize the inherent worth and potential of every human being and acknowledge the counselor’s responsibility to create optimal conditions in the counseling relationship to encourage client growth. Expressing accurate empathy is another of Rogers’s (1957) critical conditions for change and it is heavily emphasized in MI. Accurate empathy requires the counselor to see the world through the eyes of the client and to make statements that express a sincere understanding of the client’s perspective. Supporting client autonomy requires the MI practitioner to avoid the notion of “making” clients do things and instead recognize each individual’s freedom and capacity to choose their own direction (Miller & Rollnick, 2013). Support for client autonomy can be expressed by emphasizing the client’s personal choice and control in their decision to change or to not change and by asking the client’s permission before offering a suggestion. The fourth component of acceptance involves affirmations, which include recognizing and making statements that acknowledge and reinforce the clients’ strengths and efforts (Miller & Rollnick, 2013).

In addition to partnership and acceptance, compassion and evocation are essential components of the MI spirit. Compassion emphasizes that the MI counselor’s focus remains on
the welfare of the client and the counselor acts in the best interest of the client with a sincere desire to help. In regard to evocation, MI counselors believe clients have what they need within them concerning change, and the counselor’s job is to help clients recognize this and take action. Throughout the counseling relationship, the counselor elicits information about the problem from the client’s perspective, as well as information about the client’s goals, values, strengths, and struggles. In this way, the counselor seeks to understand and empathize with the client’s subjective experiences related to the presenting issues, explore the client’s ambivalence about change, and evoke the client’s personal motivations to change.

By incorporating MI into basic counseling skills courses students are provided continuity of training to understand that the humanistic underpinnings must remain the foundation when specific skills (e.g., confrontation, risk assessment) come into play. Incorporating MI into counselor training can be one way to ensure students gain solid humanistic foundation in addition to learning basic counseling skills.

**Employing Specific Techniques within a Humanistic Foundation**

Nocross and Lambert (2011) acknowledged “the deep synergy between treatment methods and the therapeutic relationship. They constantly shape and inform each other (p. 5).” Moreover, Hayes (2012) noted that there is a discrepancy between humanism and evidence-based practices in that it appears to be a dichotomous choice: humanistic or evidence-based. Motivational interviewing bridges this fault in that the crux of MI is the humanistic spirit or “way of being” with clients that must accompany the strategy and technique employed in this approach (Miller & Rollnick, 2013), and it is an evidence-based practice. Incorporating MI into counselor skill training is consistent with Whiston and Coker’s (2000) assertion “that there should be a direct connection
between methods of clinical training and factors that have been consistently shown to affect client outcome” (p. 233).

**The core skills of MI.** The essential skills of MI derive from person-centered counseling and correlate with skills typically taught in a basic counseling skills course. These skills include open questions, reflections/paraphrases, statements of affirmation, and summarizations (known as OARS in MI). Reflections and paraphrases are relied on most heavily in MI as they are considered the key to good listening, which is “fundamental to MI” (Miller & Rollnick, 2013, p. 48). Ideally, MI counselors use twice as many reflections/paraphrases in a counseling session compared to questions. In addition to OARS, providing information with permission is also considered an essential skill of MI. For this skill, counselors use a specific strategy known as elicit-provide-elicit to make a suggestion or provide relevant information to the client (Miller & Rollnick, 2013). First, the counselor elicits what the client already knows about the topic (e.g., “What do you find helps you feel less depressed?”). Then the counselor asks for permission (supporting autonomy) to provide information, and then does so if permission is granted. For example, the counselor might ask, “I have some ideas based on what I’ve seen work for other clients with similar issues. Would you like to hear about them?” After providing the information, the counselor then elicits what the client takes from the information (e.g., “Tell me what you think about that” or “How do you think that might work for you?”).

**The method of MI.** The spirit and core skills of MI are incorporated throughout the four phases of MI: engaging, focusing, evoking, and planning (Miller & Rollnick, 2013). When introduced to novice counselors, these phases may help students begin to understand the complexity of the counseling process, which is a challenge often experienced by beginning counselors (Skovholt & Rønnestad, 2003). *Engaging* is the first phase of MI. This involves
establishing an effective therapeutic alliance, including diminishing any relationship discord (formerly known as “resistance”) that might be present. Within MI, engagement is based on the belief that how the counselor responds to a client will affect how invested the client becomes in the counseling process, and specific strategies are employed to help reduce resistance and establish an effective working relationship. By learning MI in conjunction with basic counseling skills, trainees learn not only that the therapeutic relationship is important, but they also learn specific skills (e.g., reflective listening, “rolling with resistance,” affirmations) used to establish effective relationships, even with “difficult” or “resistant” clients. Motivational interviewing is remarkable in that it offers skills to build therapeutic alliances in situations when this relationship might be more challenging to cultivate, such as with mandated clients. According to Whiston and Coker (2000), such training should be of focus in counselor education programs.

In the second phase of MI, focusing, the client and counselor establish a clear direction for their work together. The focus will typically be on a specific behavior change, or the ambivalence surrounding such. After an effective therapeutic alliance and direction for counseling are established, MI counselors seek to help the client explore and resolve his or her ambivalence about change and enhance motivation to proceed with change in the evoking phase (third phase). In this phase, the MI practitioner evokes the client’s arguments in favor of change and against the status quo (statements called “change talk” in MI) and help clients further develop these arguments based on the client’s personal beliefs, values, and goals. Skills used to meet clients where they are in the change process and to explore and resolve ambivalence about change are needed among counselors as the majority of clients who present to counseling have been found to not be ready to engage in active change (Dozois et al., 2004; Norcross et al., 2011; O’Hare, 1996). In the final phase of MI, planning, the counselor and client collaboratively develop a comprehensive plan for change. This
plan includes actions to be taken by the client (e.g., employing healthy coping skills, seeking social support) and can include engagement in a specific type of treatment (e.g., cognitive behavior therapy, group counseling).

Ultimately, MI fosters people responsiveness by requiring counselors to assess and meet clients in their current readiness for change and then implement strategies appropriate for that individual in their unique change process. Motivational interviewing can empower counselors to help clients who are not yet ready to take action by providing them with skills to conceptualize and assist clients who are “resistant” to counseling or who are not yet ready to change. Oftentimes, beginning counselors fear having a client who is disengaged or defensive, and MI can provide students with the knowledge and skill base to gain self-efficacy and be helpful to these clients.

**Method**

In the current study, MI was incorporated into a basic counseling course. To evaluate the outcomes, we posed two research questions: (a) What degree of MI competency is achieved when MI is incorporated into a basic counseling skills course? and (b) Is MI competency maintained over the course of time and other counselor training? The authors applied single-case research design (SCRD) methods to collect and analyze data. As “a practical and viable method for evaluating the effectiveness of interventions that target behavior, emotions, personal characteristics, and other counseling-related constructs of interest” (Ray, 2015, p. 394), single-case designs have proven to be valuable to the counseling profession and have been encouraged in counselor education (Lundervold & Belwood, 2000; Meany-Walen, Davis-Gage, & Lindo, 2016; Ray, Barrio Minton, Schottelkorb, Garofano Brown, 2010). In this study, the SCRD was used to investigate counselor trainees’ behaviors after MI training was infused in a basic counseling skills course. Typically, SCRD includes multiple points of assessment of the target behavior, starting
with the baseline assessment and then assessing stability of the behavior over time (Ray, 2015). In the current study, we were not able to secure baseline data. However, data was evaluated at three different points and focused on the stability of counseling behaviors that were consistent with MI. Data consisted of video-recorded counseling demonstrations completed by counselor trainees as course assignments in three sequential courses: the basic counseling skills course in which MI was learned, a course on cognitive behavioral therapy (CBT course), and an addictions counseling course. In the course sequence, students completed the basic counseling skills course in the spring semester, the CBT course in the summer semester, and the addictions counseling course in the fall semester while concurrently enrolled in practicum. After receiving IRB approval of this evaluation, students consented for their counseling demonstrations to be used for research purposes.

**Participants**

Thirty-six students consented for their class assignment to be evaluated for MI competency from the counseling skills course from two sequential years of course offerings. Twenty-one of these students were enrolled in the clinical mental health counseling program (six from the first year and 15 from the second), nine in the school counseling program (six from the first year and three from the second), and six in the counseling psychology program (four from the first year and two from the second). The six clinical mental health counseling students from the first year of data collection also consented for their counseling demonstrations to be used for research from the CBT course and the addictions course. These courses were in the curriculum for clinical mental health counseling students, but not for the other academic programs.
Procedures and Data Collection

The basic counseling skills course in which MI was integrated was taught by a faculty member who is a member of the Motivational Interviewing Network of Trainers. The course is designed to prepare students for practicum by developing basic counseling skills. Motivational interviewing was introduced the fourth week of the semester and incorporated throughout the remainder of the 15-week course. Specific classes focused on the spirit and basic skills of MI, understanding and responding to ambivalence, identifying and strengthening clients’ own arguments for change, and diminishing relationship discord (i.e., resistance). During class sessions, students were introduced to the content, viewed demonstrations of specific skills, and then practiced the skills in small group role-plays. Students then received feedback on their implementation of the skills from peers and the course instructor. Students were required to complete four mock counseling sessions with a peer for course assignments. The final counseling demonstration was evaluated for MI competency for research purposes.

The CBT course required two recorded counseling demonstrations with peers. Students were expected to demonstrate the skills learned in class, which included CBT-specific skills and MI was not part of this course content. The second of these recordings was evaluated for MI competency for research purposes. Students were enrolled in an addictions counseling course while they were concurrently enrolled in practicum. In the addictions counseling course, students had the choice of recording a demonstration of their counseling skills with a student actor, who was not part of the course, for extra credit. Students were expected to demonstrate their ability to counsel a client who presented with an addiction-related issue. Both MI and CBT were discussed and practiced as effective treatments in addictions counseling previously in the semester. This recording was evaluated for MI competency for research purposes.
A total of 48 total tapes were evaluated for MI competency: 36 tapes from the counseling skills course (semester 1), 6 from the CBT course (semester 2), and 6 from the addictions counseling course (semester 3). The first author transformed the video files that served as students’ assignments to audio-only files and assigned codes to data to protect the identity of students during data analysis.

Data Analysis

Instrument. The evaluation team utilized the Motivational Interviewing Treatment Integrity (MITI 3.1.1; Moyers, Martin, Manuel, Miller, & Ernst, 2010) to determine the level of MI competency attained by students. 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. The MI spirit is calculated by averaging the scores for evocation, collaboration, and autonomy/support. 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 students’ 45-50 minute counseling demonstrations were extracted to be evaluated.

Evaluators. Three evaluators, who were doctoral students at the time of the study (second, third, and fourth authors), were trained by the first author to use the MITI using a MITI coding training program (MITI Practice Program) and materials provided by the Motivational Interviewing Network of Trainers. The evaluators did not begin rating data until they reached consistent reliability as a group. The evaluators met with the first author every other week when evaluating data in order to maintain interrater reliability and to ensure fidelity to the MITI.
**Interrater reliability.** Thirteen (27%) of the 48 total tapes were double coded for interrater reliability. Percent agreement was calculated among global scores due to not enough variation between scores to calculate an intraclass correlation coefficient (ICC). Percent agreement for the global scores within one rating point was 97%. The following presents the percent agreement of each global score: Evocation = 100% within one rating point, 61.5% exact agreement; Collaboration = 92% within one rating point, 77% exact agreement; Autonomy/Support = 92% within one rating point, 54% exact agreement; Direction = 100% within one rating point, 77% exact agreement; and Empathy = 100% within one rating point, 61.5% exact agreement. The calculated ICCs were evaluated using Cicchetti’s (1994) system, which suggests those below 0.40 show poor clinical significance, 0.40–0.59 are fair, 0.60–0.74 are good, and 0.75-1.00 are excellent. The ICCs for specific behavior counts were as follows: Giving information = .699, MI Adherent = .662, MI Nonadherent = .596, Closed questions = .929, Open questions = .973, Simple reflections = .819, Complex reflections = .441. The average ICC was .73 (good) including complex reflections and .78 (excellent) without complex reflections.

**Results**

**Research Question 1: What degree of MI competency is achieved when MI is incorporated into a basic counseling skills course?**

**Global dimensions and MI spirit.** Findings indicated that the majority of students achieved competency in demonstrating the global dimensions of MI, including the spirit of MI. Where a score of 4 or greater suggests competency, students (n=36) scored an average of 4.18 for all global dimensions (evocation, collaboration, autonomy/support, direction, and empathy). The mean score for direction was 4.64, 4.17 for evocation, 4.11 for autonomy/support, 4.06 for empathy, and 3.94 for collaboration. The average global scores and percentages of students who
achieved competency are presented in Table 1. The MI spirit was calculated by averaging students’ global scores for evocation, collaboration, and autonomy/support (Moyers et al., 2010). Students’ mean score was 4.14 indicating they achieved competency in demonstrating the MI spirit. In this course, 80.56% (n=29) of students reached competency in demonstrating the MI spirit, 5.56% (n=2) achieved beginning proficiency (i.e., scored between 3.5 and 4), and 13.89% (n=5) scored below beginning proficiency (scored between 3.0 and 3.4) (see Table 2).

Table 1

Means and Modes of Global Scores in the Basic Counseling Skills Course and Percentage (And Number) of Students Who Reached Competency

<table>
<thead>
<tr>
<th>Global Dimension</th>
<th>Mean</th>
<th>Mode</th>
<th>Below Proficiency</th>
<th>Beginning Proficiency</th>
<th>Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evocation</td>
<td>4.17</td>
<td>4</td>
<td>13.9% (5)</td>
<td>86.1% (31)</td>
<td></td>
</tr>
<tr>
<td>Collaboration</td>
<td>3.94</td>
<td>4</td>
<td>16.7% (6)</td>
<td>83.3% (30)</td>
<td></td>
</tr>
<tr>
<td>Autonomy/Support</td>
<td>4.11</td>
<td>4</td>
<td>16.7% (6)</td>
<td>83.3% (30)</td>
<td></td>
</tr>
<tr>
<td>Direction</td>
<td>4.64</td>
<td>5</td>
<td>2.8% (1)</td>
<td>97.2 (35)</td>
<td></td>
</tr>
<tr>
<td>Empathy</td>
<td>4.06</td>
<td>4</td>
<td>11.1% (4)</td>
<td>88.9 (32)</td>
<td></td>
</tr>
</tbody>
</table>

Note: N = 36. According to the MITI 3.1.1, the benchmark for competence is 4.0 for global scores.

Behavior counts. Table 2 shows the percentages and numbers of students who demonstrated “below proficiency”, “beginning proficiency”, and “competency” according to MITI benchmarks. In the basic counseling skills course, students’ percentage of open questions (number of open questions divided by total questions) ranged from 18% to 89% with a mean of 58% (SD=17.56), and where 70% and above is considered competency. Students used complex (vs. simple) reflections at rates between 14% and 62% with a mean of 48% (SD=20.13), and where 50% suggests competency. The percentage of students’ utterances that were considered MI adherent (vs. non-adherent) ranged from 36% to 100% with a mean of 87% (SD=16.70), and where
100% suggests competency. Finally, students’ reflection-to-question ratios ranged from 0.42 to 1.92 with a mean of 0.95 (SD=0.33) and where 1.00 suggests beginning proficiency and 2.00 suggests competency.

Table 2

<table>
<thead>
<tr>
<th></th>
<th>Mean (SD)</th>
<th>Below Beginning Proficiency</th>
<th>Beginning Proficiency</th>
<th>Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spirit</td>
<td>4.14 (0.49)</td>
<td>13.9% (5)</td>
<td>5.5% (2)</td>
<td>80.6% (29)</td>
</tr>
<tr>
<td>Open Questions (%)</td>
<td>58.03 (17.56)</td>
<td>33.3% (12)</td>
<td>36.1% (13)</td>
<td>30.6% (11)</td>
</tr>
<tr>
<td>Complex Reflections (%)</td>
<td>48.10 (20.13)</td>
<td>27.8% (10)</td>
<td>16.6% (6)</td>
<td>55.6% (20)</td>
</tr>
<tr>
<td>MI Adherent (%)</td>
<td>87.12 (16.70)</td>
<td>44.4% (16)</td>
<td>5.6% (2)</td>
<td>50% (18)</td>
</tr>
<tr>
<td>Reflection-to-Question Ratio</td>
<td>0.95 (0.33)</td>
<td>52.8% (19)</td>
<td>47.2% (17)</td>
<td>0% (0)</td>
</tr>
</tbody>
</table>

Note. N = 36. 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 competence is 70% and above of total questions asked. For complex reflections, below proficiency is <40%; beginning proficiency is 40%-49%; and competence is 50% and above of total reflections made. For MI adherent behaviors, below proficiency is <90%; beginning proficiency 90%-99%; and competence 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 competence is 2.00.

Research Question 2: Is MI competency maintained over the course of time and other counselor training?

Evaluations from the second semester (CBT course) showed that students (n=6) scored an average of 4.22 for the MI spirit with all students scoring above the benchmark for competency (i.e., above 4.00). In the third semester (addictions course), these same students demonstrated a mean score of 3.94 for the MI spirit with two students scoring at the beginning proficiency level (3.50 – 4.00) and the remaining four scoring competently (above 4.00) (see Figure 1).
Figure 1 MI Spirit Scores

Concerning behavior counts, in the second semester, students scored an average of 44.38% (SD=19.95) for percent open questions, 22.95% (SD=11.80) for percent complex reflections, 68.97% (SD=19.15) for percent MI adherent behaviors, and 0.64 (SD=0.09) for reflection-to-question ratio. In the third semester, students scored an average of 47.03% (SD=15.28) for percent open questions, 42.28% (SD=19.91) for percent complex reflections, 94.87% (SD=12.56) for percent MI adherent behaviors, and 0.72 (SD=0.32) for reflection-to-question ratio. Table 3 presents the groups means across semesters.

Due to the small sample size, nonparametric Wilcoxon signed rank tests were run to detect significant differences between semesters for the six students who provided data for each of the three semesters. Results showed that the MI spirit significantly declined between semesters one and three (Z=-2.201, p=.028). For complex reflections, a significant difference was detected.
between semesters one and two ($Z=-1.992, p=.046$) in that students had lower percentages in the second semester (semester one median = 48.22 and semester two median = 26.80); however, a significant difference was also detected between semesters two and three ($Z=-1.992, p=.046$) in that students increased their percentage of complex reflections in the third semester (semester two median = 26.80 and semester three median = 52.27). Figure 2 depicts the visual inspection of the behaviors across the three semesters. A significant difference was also detected between semesters two and three for percent MI adherent behaviors ($Z=-1.992, p=.046$) wherein this percentage increased from a mean of 68.98 (SD=19.15) to 94.87 (SD=12.56). These findings are presented in Table 3.

Table 3

*Group Means and Significant Changes Between Semesters*

<table>
<thead>
<tr>
<th></th>
<th>Semester 1</th>
<th>Semester 2</th>
<th>Semester 3</th>
<th>Z (Sem2-1)</th>
<th>Z (Sem3-2)</th>
<th>Z (Sem 3-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MI Spirit</td>
<td>M 4.57</td>
<td>M 4.22</td>
<td>M 3.95</td>
<td>-1.476</td>
<td>-1.414</td>
<td>-2.201*</td>
</tr>
<tr>
<td></td>
<td>SD 0.29</td>
<td>SD 0.27</td>
<td>SD 0.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Open Questions</td>
<td>50.97</td>
<td>44.38</td>
<td>47.03</td>
<td>-0.943</td>
<td>-0.314</td>
<td>-0.314</td>
</tr>
<tr>
<td></td>
<td>19.68</td>
<td>19.95</td>
<td>15.28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Complex Reflections</td>
<td>44.77</td>
<td>22.95</td>
<td>42.28</td>
<td>-1.992*</td>
<td>-1.992*</td>
<td>-0.105</td>
</tr>
<tr>
<td></td>
<td>16.26</td>
<td>11.80</td>
<td>19.91</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>% MI Adherent Reflection-to-question ratio</td>
<td>84.15</td>
<td>68.98</td>
<td>94.87</td>
<td>-1.153</td>
<td>-1.992*</td>
<td>-1.095</td>
</tr>
<tr>
<td></td>
<td>16.21</td>
<td>19.15</td>
<td>12.56</td>
<td></td>
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<tr>
<td>Reflection-to-question ratio</td>
<td>0.94</td>
<td>0.64</td>
<td>0.72</td>
<td>-1.572</td>
<td>0.000</td>
<td>-1.214</td>
</tr>
<tr>
<td></td>
<td>0.35</td>
<td>0.10</td>
<td>0.32</td>
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</tr>
</tbody>
</table>

*Note. N = 6. Z-statistic calculated using Wilcoxon signed-rank test. * $p < 0.05.$
Figure 2. Percent Complex Reflections

![Chart](chart.png)

**Figure 2.** Percent complex reflections was calculated by dividing total number of reflections/paraphrases by number of complex reflections. Skills course was the first semester of data collection, CBT course was the second semester, and the addictions course was the third sequential semester.

**Discussion**

After MI was incorporated into a basic counseling skills course, the majority of students achieved competency in demonstrating the global dimensions (evocation, collaboration, autonomy/support, direction, and empathy) of MI practice, including the MI spirit (average of evocation, collaboration, and autonomy/support). Further, the scores of the six students who provided data across all three semesters consistently hovered around or above the competency benchmark in demonstrating the spirit of MI, suggesting that students’ competence in demonstrating the spirit of MI was largely maintained over time and other counselor training. These findings offer preliminary support that MI may be able to help students adopt a foundation in demonstrating humanism and the common factors that have been linked to positive outcomes in counseling (e.g., Lambert & Barley, 2001) when incorporated into a basic counseling skills
course. However, the weakening of students’ implementation of the MI spirit is concerning as findings showed a significant decline in students’ demonstration of the MI spirit between semesters 1 and 3 (see Figure 1). This evaluation is consistent with MI training studies that have found that MI skills acquired through initial training diminish over time without some type of follow-up MI training (Miller & Mount, 2001, Miller et al., 2004).

Although students were largely successful in adopting the spirit of MI, some students struggled with adopting the specific skills of MI. Two-thirds (66.7%) of students in the basic skills class demonstrated beginning proficiency or competency in asking more open questions vs. closed questions, leaving one-third of the class continuing to ask a disproportionate number of closed questions, and these trends did not change among the students who were evaluated across three semesters. Almost three-quarters (72.2%) of students used more complex than simple reflections, leaving 27.8% scoring below the beginning proficiency level. Looking at students’ use of complex reflections over time, these students used fewer complex reflections in the second semester compared to the first semester, then two-thirds of students increased their use of complex reflections in the third semester to a level of competency. It could be speculated that the decline and then reemergence of this skill was perhaps due to complex reflections not being part of students’ training in CBT. However, when students were not explicitly directed to use MI or CBT in the third semester, complex reflections reentered the majority of students’ skill set (see Figure 2).

When examining students’ demonstrations of MI adherent behaviors (i.e., asking permission before making a suggestion, affirming the client, emphasizing client autonomy) compared to non-adherent behaviors (i.e., advising without permission, directing, ordering), 55.6% of students achieved beginning proficiency or competency, meaning that the remaining
students struggled to refrain from using behaviors that are inconsistent with MI. Similar to complex reflections, students’ percentages of MI adherent behaviors declined in the second semester, and then increased in the third semester. Again, this finding might be related to the training students received in the second semester, which was specific to CBT, which can potentially conflict with MI (Burke, 2011; Moyers & Houck, 2011).

When looking at the ratio of reflections-to-questions, students were split somewhat evenly between beginning proficiency and below proficiency (47.2% and 52.8%, respectively). This is evidence that students struggled with using more reflections and paraphrases than questions. Given that no student achieved the 2:1 competency benchmark, this finding suggests that additional training in developing reflective listening skills was necessary. In the second semester, each student scored below proficiency, and only one student of six (16.7%) demonstrated beginning proficiency in third semester. Similar to trends observed with complex reflections and MI adherent behaviors, the decline in students’ use of reflections and/or increased use of questions may have been influenced by the training they were receiving in CBT.

Implications

The philosophy of MI is aligned with the counseling profession as it is strength-based and supports client autonomy. It emphasizes empathy and evocation to encourage clients to act consistently with their goals and values. Further, the use of MI has implications for social justice and facilitates counselors working within the client’s unique cultural context and change process (Miller, 2013). The current study found that incorporating MI training in a counseling skills course was indeed effective in helping students achieve competency in executing the MI spirit, and to varying degrees, MI-consistent skills. By executing the spirit of MI competently, students are demonstrating their abilities to create a counseling relationship that is collaborative, empathic, and
supportive of the client's autonomy. Further, this relationship is focused on evocation and taking a direction toward a specific outcome goal. This can be especially useful for counselor trainees who struggle to maintain a humanistic perspective with clients who might be perceived as “difficult” or “resistant,” such as those who present to counseling as a result of an outside force (e.g., court mandate, a family member’s coercion). Given that the majority of clients will present in early stages of change (Dozois et al., 2004; Norcross et al., 2011; O’Hare, 1996), it can be argued that such skills are essential for effective counseling practice. Further, students are also exposed to an evidence-based practice early in their counselor training, which is consistent with counselors’ responsibility to use methods that have empirical support (ACA, 2014) as well as the responsibility of counselor educators to include evidence-based counseling strategies in curriculum (CACREP, 2016).

However, challenges in maintaining MI proficiency have been well documented (Martino, Ball, Nich, Frankforter, & Carroll, 2008; Miller & Mount, 2001, Miller et al., 2004), and were also found in this study, especially in regard to complex reflections. Considering this knowledge, introducing students to MI early in counselor training and including additional training and practice feedback throughout the counselor education program may be most beneficial for students to maintain competency and further develop more complex skills. As our study also found that training experiences other than MI training can significantly influence counselor trainees’ execution of MI skills, counselor educators and supervisors might consider how to encourage an integration of MI and other empirically supported counseling methods (e.g., CBT). More research is needed to understand effective training methods to facilitate this type of integration.
Limitations and Ideas for Future Research

This study used a single-case design and was limited to a small sample size. Studies utilizing a control group and baseline assessments with larger sample sizes are needed. This study was also limited to three subsequent semesters. Studies that investigate the duration of the effects of MI training on counselor practice are needed. Future research is also needed to investigate methods to train counselors to competently use MI in addition to other counseling methods. Finally, investigations focused on how MI training and subsequent use of MI effects client outcomes are needed.

Counselors in all settings will come across clients who are ambivalent about change, so MI could be useful to all counselor trainees. Whiston and Coker (2000) recommended that counselor educators focus on teaching interventions that have demonstrated efficacy and spend more time helping students learn complex counseling skills as opposed to basic interviewing skills. Incorporating MI into basic counseling skills courses is consistent with this recommendation as MI has a significant research base and it requires counselors to use more complex skills in order to match the client’s readiness for change and to assist clients in navigating their unique change process. Motivational interviewing is a current and efficient treatment method that meets the call to infuse EBPs into counselor training programs. However, MI is not simple to learn and requires intensive training (Miller et al., 2004; Miller & Moyers, 2006). Additional research is needed to further explore the impact of integrating MI in a basic counseling skills course.
References


MITI practice program [Computer software program]. Tucson, AZ: Robert Rhode.


