Counselor Training in Two Evidence-Based Practices: Motivational Interviewing and Cognitive Behavior Therapy

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Counselor Training in Two Evidence-Based Practices: Motivational Interviewing and Cognitive Behavior Therapy

Abstract
This study served as a preliminary investigation of training counseling students in two evidence-based practices: motivational interviewing and cognitive behavior therapy. Students' skill demonstrations were assessed for competency at three data points during students' graduate training program. Results showed modest success in students learning to competently practice both evidence-based approaches.

Author's Notes
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Keywords
evidence-based practice, counselor training, psychotherapy integration, cognitive behavior therapy, motivational interviewing

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Counselor training programs are encouraged to integrate evidenced-based practices (EBPs), or counseling approaches that have demonstrated efficacy via clinical trials, into program curriculum (Patel, Hagedorn, & Bai, 2013). For example, the Council for Accreditation of Counseling and Related Educational Programs (CACREP, 2009) and the American Counseling Association (ACA, 2014) have addressed the responsibilities of counselor educators to provide an educational foundation and train students in EBPs. Specifically, CACREP standard II.G.5.d notes that “students will be exposed to models of counseling that are consistent with current professional research and practice in the field” (p. 12), and Code C.7a in the ACA ethical guidelines states that counselors are required to “use techniques/procedures/modalities that are grounded in theory and/or have an empirical or scientific foundation” (p. 10). Despite this, there has been a dearth of information about how counselor educators teach EBPs (Patel et al., 2013). In this study, we conducted a preliminary investigation of the practice outcomes of graduate student counselor training over the course of three semesters in two evidence-based practices: motivational interviewing and cognitive behavior therapy.

**Counselor Training in Evidence-Based Programs and Practices**

By training students in EBPs, counselor educators bridge the gap between research and practice (Sexton, 2000) and help promote the profession, as counselors who implement EBPs are taking steps to better serve their clients, and therefore demonstrate leadership and advocacy (Hays, Wood, & Smith, 2012). Literature suggests that counselor training in EPBs is happening in a number of ways. For example, Martino (2010) found that addiction counselors were provided training on EBPs utilizing several modalities (i.e. workshops, clinical supervision, distance learning, and blended learning). School counselors are approaching the urgency for the use of EBPs by means of data to identify problems, implementing EBPs, identifying evidenced-
based curricula, and evaluating the effectiveness of chosen EBPs (Carey & Dimmitt, 2008). Additional modalities being utilized to train counselors in EBPs include didactic lectures, training manuals, and active learning opportunities such as modeling, clinical practice, and behavioral role-plays (Beidas & Kendall, 2010). Although training and pedagogy in EBPs has increased, there continues to be a lack of research regarding best practices in the pedagogy of EBPs, as well as evaluation methods.

Training in Two Evidence-Based Practices

When contemplating training students in EBPs, counselor educators must consider to which approaches to expose students and the growing trend of psychotherapy integration (Norcross & Halgin, 2005). In the current study, students learned two EBPs that have an established research base supporting their integration. Here, each counseling approach is briefly described followed by a description of the MI+CBT integration.

**Cognitive behavior therapy.** Cognitive behavior therapy (CBT) encompasses a wide range of practices that incorporate both cognitive and behavioral conceptualizations and interventions. Psychological distress is considered a result of dysfunctional cognitive processes, and change is believed to occur by identifying and restructuring distorted ways of thinking. CBT interventions are typically educational in nature, wherein clients learn that thoughts precede behaviors, and are the trigger to emotions that determine a behavior response (Beck, 2011).

CBT is one of the most extensively used and researched therapeutic approaches, and it has been found to be efficacious in the treatment of a range of issues including anxiety disorders, mood disorders, substance use disorders, eating disorders, and relationship conflicts (Beck, 2005; Nathan & Gorman, 2007). Outcome studies have consistently found CBT to be superior or equal to alternative treatments (Butler et al., 2006), and various CBT practices and programs have been
deemed evidence-based by the Substance Abuse and Mental Health Services Administration’s (SAMHSA) National Registry of Evidenced-Based Programs and Practices (www.nrepp.samhsa.gov).

**Motivational Interviewing.** Counselor educators have been encouraged to seek training in motivational interviewing (MI) in order to further disseminate EBPs in counselor education curriculum (Patel et al., 2013). MI is a humanistic style of counseling designed to evoke clients’ own motivations for change in an empathic and compassionate environment (Miller & Rollnick, 2013). MI was developed to work with problem drinkers who were in early stages of change (Miller, 1983), including those who entered counseling via an outside force (e.g., court mandate, family member’s coercion) and those who are ambivalent about change. MI practice consists of an essential spirit that is comprised of a partnership with the client, acceptance of the client (including absolute worth, accurate empathy, supporting autonomy, and affirmation), compassion toward the client, and evocation in that the counselor seeks to draw out and understand the client’s perceptions, experiences, and motivations. In addition to its spirit, MI practice consists of basic skills (i.e., open questions, affirmations, reflections, summarizations, and providing information with permission) that are used strategically throughout the four phases of MI: engaging, focusing, evoking, and planning (Miller & Rollnick, 2013).

Hundreds of clinical trials have been conducted using MI (Miller & Rollnick, 2013), and it has been deemed an evidence-based practice (SAMHSA, 2007). MI has demonstrated efficacy across diverse populations, symptoms, and behaviors including chronic mental disorders management, enhancing treatment adherence, problem gambling, smoking cessation, generalized anxiety disorder, co-occurring mental health and substance use disorders, and various health issues (Cleary et al., 2009; Hettema et al., 2005; Lundahl et al., 2010; Westra et al., 2009). MI
can be used as a stand-alone intervention as well as used as a pretreatment or integrated with other treatments (Miller & Rollnick, 2004). MI is specifically useful with clients who experience ambivalence, and as such, it was never intended to be a panacea (Miller & Rollnick, 2009). Counselors who practice MI are not expected to abandon prior methods; rather, they are encouraged to incorporate MI into existing practices such as CBT. Overall effects of MI and another approach (e.g., CBT) have been characterized as synergistic (Miller & Rose, 2009).

**Integrating MI and CBT.** In the current study, counselor trainees learned MI and CBT for their clinical utility as independent approaches as well as an integrated practice. When integrated, MI is used to engage the client and enhance client readiness to change, and CBT is used to help clients actively change their behaviors (Kertes et al., 2011). MI supplements CBT by encouraging counselors to meet clients in their unique process of change and address motivational issues. As Geller and Dunn (2011) stated, “A skillful CBT therapist may intuitively manage their pacing and interventions to patient readiness but MI makes these goals explicit and provides a language and set of techniques to assist in the process” (p. 13). CBT supplements MI by providing action-based interventions to help clients learn how to modify their thoughts and behaviors. The MI+CBT integration thus creates a comprehensive, personalized treatment experience that is responsive to the specific needs of each individual.

There is a growing research base to support the efficacy of the MI+CBT integration in the areas of substance abuse and addiction, co-occurring disorders, and mental health. For example, in regard to treating alcohol dependence, the COMBINE Research Study Group (2003) found that MI+CBT with medical management was as efficacious as naltrexone and medical management in reducing drinking (Anton et al., 2006). Research has also supported the use of MI+CBT integration with adolescents who abuse cannabis (Dennis et al., 2004). Beyond
substance use disorders, among persons experiencing pathological gambling MI+CBT has been found to reduce gambling urges and behaviors, lower gambling severity, reduce depression and anxiety symptoms, and improve psychosocial functioning more effectively than Gamblers Anonymous (Grant et al., 2009). Pertaining to co-occurring disorders, Cleary et al. (2009) conducted a systematic review of MI, CBT, MI+CBT, and six other treatment approaches. Findings showed that MI was the most effective in reducing substance use and that MI+CBT led to the greatest improvements in mental health symptoms as well as reductions in substance use problems. Cornelius et al. (2011) investigated treatments for adolescents (ages 15-20) who were diagnosed with an alcohol use disorder and major depressive disorder. They found that participants improved more with MI+CBT on symptoms of depression and alcohol use compared to fluoxetine, and that these differences were maintained at the two-year follow-up.

Concerning mental health, among persons with generalized anxiety disorder, research has found that four sessions of MI prior to eight sessions of CBT resulted in greater reduction in worry and increased homework compliance compared to CBT alone (Westra, Arkowitz, & Dozois, 2009) as well as reduced resistance and greater engagement in the CBT treatment (Aviram & Westra, 2011). There has also been some empirical support for the MI+CBT combination for social anxiety (Buckner & Schmidt, 2009), obsessive-compulsive disorder (Meyer et al., 2010), anxiety related to traumatic brain injury (Hsieh, Ponsford, Wong, Schönberger, Taffe, & Mckay, 2012), and eating disorders (Dean, Touyz, Rieger, & Thornton, 2008). Arguments have been made for the CBT+MI integration to be used with depressed (Flynn, 2011) and suicidal clients (Britton, Patrick, Wenzel, & Williams, 2011), but research is needed in these areas.
Counselor training in EBPs is an important practice in counselor education, and research is needed to inform pedagogical practices. MI and CBT are both well-established EBPs with growing support for their integration. This study served as a preliminary investigation of the impact of counselor training in these two evidenced-based practices.

Method

In this study we sought to respond to the research question, “Can counselor trainees learn to competently practice two evidence-based practices, MI and CBT, in their graduate training program?” In addition, we investigated whether or not counselor trainees used both MI and CBT in a mock counseling session after learning both approaches. The Human Subjects Review Board approved each component of this study, and it was conducted in compliance with the American Counseling Association’s ethical guidelines (2005).

Procedures

Participants’ (counselor trainees) mock counseling sessions from three sequential semesters were used as three separate data points for this study. The first data point was a recorded mock counseling session that served as the final assignment in a basic counseling skills course that included training in MI. These recordings were evaluated for MI competency for the purpose of this study. The second data point was a recorded mock counseling session that served as participants’ final assignment for a course on CBT. The third and final data point was a recorded mock counseling session that served as an extra credit assignment for an addictions counseling course that students enrolled in concurrently with practicum. The second and third data points were evaluated for MI and CBT competency for the purposes of this study. The recorded mock counseling sessions were in video format for class purposes, but converted to audio files for research purposes in order to protect the identity of participants.
Description of counselor training and data collection. Due to its humanistic spirit and essential skills that overlap with the content typically taught in a basic counseling skills course (see Iarussi, Tyler, Littlebear, & Hinkle, 2013), MI was incorporated into a required three credit-hour basic counseling skills course that was taught by the first author who is an assistant professor and who completed intensive training to train others in MI. 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 (e.g., resistance). MI-specific readings were required and video demonstrations of MI skills were utilized. Skill development and practice were emphasized throughout the course in that for each skill presented, a video or interactive demonstration was shown, students practiced the skills using role-plays, and then feedback was provided from classmates and the instructor. Class assignments included four recorded demonstrations of their counseling skills using role-play with a classmate, the fourth of which was used as data in this study.

The semester after they completed the basic counseling skills course, six students completed a three credit-hour course on CBT that was required for their academic program. This course focused on learning and applying CBT and incorporated required readings and video demonstrations. Students practiced implementing CBT skills using role-plays with classmates and they received feedback on their skills as part of the course. Students completed two recorded mock counseling sessions as part of their required assignments, the second of which was used as data for this study.

The semester following the CBT course, these same six students completed a three credit-hour course specific to addiction counseling that was required for their academic program. Students were concurrently enrolled in practicum and seeing clients at their community-based
site placements. As MI and CBT are evidenced-based practices in addiction counseling, their use and integration were discussed as part of the addictions course. A student actor who was not involved with participants’ coursework role-played a standard client with each participant in a recorded mock counseling session. A standard client was chosen due to policy restrictions that prevented students from providing their actual audio-recorded counseling sessions with their practicum clients for research purposes. After completing this assignment, students were provided with feedback on their use of MI and CBT with a client experiencing addiction.

**Participant Recruitment.** To reduce coercion potential considering that the primary researcher was also the course instructor of the three courses from which data was collected, participants were invited to participate in this study after final grades had been posted following the conclusion of the basic counseling skills and the CBT courses. For the third data point, students had the option to complete the counseling demonstration for extra credit in the course without consenting to participate in the study. Therefore, no incentives were offered for students’ participation in any portion of this study.

**Participants**

Sixteen students consented to use their final recorded assignment as data from the basic counseling skills course. They were all second semester graduate students in various counselor training programs: six were enrolled in the Clinical Mental Health Counseling program, six in the School Counseling program, and four in the Counseling Psychology program. Participants were 87.5% female (n=14) and 68.8% Caucasian/White (n=11) and 31.2% African-American/Black (n=5). The six students who were enrolled in the Clinical Mental Health Counseling program enrolled in the CBT and addictions course, which were required for their program of study. Each of these six students consented to use their recorded mock counseling
sessions from the CBT and addictions courses. Four of these students identified as Black/African-American and two as White/Caucasian and their mean age was 23 years old.

**Data Analysis**

**Instruments**

The research 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 participants and the Cognitive Therapy Scale (CTS; Young & Beck, 1980) to determine the level of CBT competency attained. 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 participants’ 45-50 minute counseling demonstrations were extracted and evaluated for this study.

The CTS is organized into four parts: (a) general therapeutic skills; (b) conceptualization, strategy, and technique; (c) additional considerations; and (d) overall ratings and comments. General therapeutic skills include setting the agenda, feedback, understanding, interpersonal effectiveness, collaboration, and pacing and efficient use of time. Conceptualization, strategy, and technique includes guided discovery, focusing on key cognitions or behaviors, strategy for change, application of cognitive-behavioral techniques, and homework. Additional
considerations involve any special problems and unusual factors of the session. Finally, overall ratings involve the rater’s overall perceptions of the therapist and the difficulty of the client’s presentation. The rater uses a 0 to 6 scale (0 being poor and 6 being excellent) to assess each of the areas in the first two parts of the CTS. Parts three and four include a variety of items including yes/no questions and scaling questions.

**Raters and interrater reliability**

Three raters, 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 and materials provided by the Motivational Interviewing Network of Trainers. Two of these raters (third and fourth authors) were also trained to use the CTS using the CTS manual and practice sessions. The raters did not begin rating data until they reached consistent reliability as a group. The raters met with the first author every other week when evaluating data in order to maintain interrater reliability and to ensure fidelity to the MITI and CTS.

Twenty five percent of tapes were double coded for interrater reliability (eight of the 28 tapes coded for MI competency and two of the 12 tapes coded for CBT competency). Percent agreement was calculated among global scores of the MITI and the CTS scores due to not enough variation between scores to calculate ICC. Percent agreement for each of the five global scores of the MITI within one rating point was 100%. Similarly, concerning the CTS, percent agreement within one rating point was 100%. The ICCs for specific behavior counts were as follows: Giving information = .836, MI Adherent = .715, MI Nonadherent = .773, Closed questions = .946, Open questions = .960, Simple reflections = .887, Complex reflections = .086. The average ICC was .74 (good) including complex reflections and .85 (excellent) without complex reflections per Cicchetti (1994).
Results

In order to respond to the research questions, the research team evaluated participants’ recorded mock counseling sessions for MI and CBT competency using the MITI and the CTS. MI competency was assessed at each of the three data points: 1) in the basic counseling skills course, 2) in the CBT course, and 3) while enrolled in practicum. CBT competency was assessed in the CBT course and while participants were enrolled in practicum. Descriptive statistics were run to determine level of competency achieved in each counseling approach at the varying data points. Nonparametric Wilcoxon signed rank tests (due to small sample size) were run to detect significant differences in levels of competency between semesters.

MI Competency

Overall, 81.25% of participants reached “competency” (average score of 4 or greater) across the global dimensions of MI in the basic counseling skills course. Table 1 presents the group mean scores each global dimension per semester. The mean score for the MI Spirit was 4.34 (SD=0.45), suggesting competency. In the CBT course, participants scored an average of 4.22 (SD=0.27) for MI spirit with each participant scoring at or above the benchmark for competency. While enrolled in practicum, participants’ mean score was 3.95 (SD=0.25) for the MI spirit with two participants scoring at the beginning proficiency level (scores 3.50 – 4.00) and the remaining four scoring competently.
Table 1

*Groups Means (and Standard Deviations) for MI Global Scores*

<table>
<thead>
<tr>
<th>Semester</th>
<th>Evocation</th>
<th>Collaboration</th>
<th>Autonomy</th>
<th>Direction</th>
<th>Empathy</th>
<th>MI Spirit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.25 (0.68)</td>
<td>4.06 (0.77)</td>
<td>4.25 (0.77)</td>
<td>4.88 (0.34)</td>
<td>4.25 (0.45)</td>
<td>4.34 (0.45)</td>
</tr>
<tr>
<td>2</td>
<td>4.00 (0.00)</td>
<td>4.50 (0.55)</td>
<td>4.33 (0.52)</td>
<td>5.00 (0.00)</td>
<td>4.00 (0.00)</td>
<td>4.22 (.027)</td>
</tr>
<tr>
<td>3</td>
<td>4.00 (0.00)</td>
<td>3.83 (0.75)</td>
<td>4.00 (0.00)</td>
<td>4.67 (0.52)</td>
<td>4.33 (0.52)</td>
<td>3.95 (0.25)</td>
</tr>
</tbody>
</table>

*Note.* According to the MITI, for Global Scores below proficiency is < 3.5, beginning proficiency is 3.5 - 4.0, and competency is 4.0 and above.

Table 2 shows the percentage of participants who demonstrated “below proficiency”, “beginning proficiency”, and “competency” in the seven dimensions of behavior counts in MI across semesters. In the basic skills course, participants had mean scores of 58.94% (SD=19.78) open questions (50% is considered beginning proficiency), 43.06% (SD=13.25) complex reflections (40% is beginning proficiency), 83.42% (SD=20.72) MI-adherent behavior (90% is beginning proficiency), and 0.99 (SD=0.36) reflection-to-question ratio (1.00 is considered beginning proficiency). In the CBT course, participants scored means of 44.38% (SD=19.95) open questions, 22.95% (SD=11.80) complex reflections, 68.97% (SD=19.15) MI adherent behaviors, and 0.64 (SD=0.09) reflection-to-question ratio. In the third semester, participants scored means of 47.03% (SD=15.28) open questions, 42.28% (SD=19.91) complex reflections, 94.87% (SD=12.56) MI adherent behaviors, and 0.72 (SD=0.32) reflection-to-question ratio.
Table 2

Percentages of Participants who Achieved Competency of MI Skills

<table>
<thead>
<tr>
<th>Semester</th>
<th>Skill</th>
<th>Below Proficiency</th>
<th>Beginning Proficiency</th>
<th>Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Open Questions</td>
<td>37.6%</td>
<td>31.5%</td>
<td>31.5%</td>
</tr>
<tr>
<td></td>
<td>Complex Reflections</td>
<td>31.5%</td>
<td>25.1%</td>
<td>44%</td>
</tr>
<tr>
<td></td>
<td>MI Adherent</td>
<td>43.9%</td>
<td>12.6%</td>
<td>43.8%</td>
</tr>
<tr>
<td></td>
<td>Reflection to Question Ratio</td>
<td>56.3%</td>
<td>43.7%</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td>Open Questions</td>
<td>50%</td>
<td>33.3%</td>
<td>16.7%</td>
</tr>
<tr>
<td></td>
<td>Complex Reflections</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>MI Adherent</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Reflection to Question Ratio</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>3</td>
<td>Open Questions</td>
<td>50%</td>
<td>50%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Complex Reflections</td>
<td>33.3%</td>
<td>0%</td>
<td>66.7%</td>
</tr>
<tr>
<td></td>
<td>MI Adherent</td>
<td>16.7%</td>
<td>0%</td>
<td>83.3%</td>
</tr>
<tr>
<td></td>
<td>Reflection to Question Ratio</td>
<td>83.3%</td>
<td>16.7%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Note. According to the MITI, for open questions, below proficiency is < 50%, beginning proficiency is 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, below proficiency is < 90%, beginning proficiency is 90% - 99%, and competency is 100% of total MI Adherent and MI nonadherent utterances. For reflection-to-question ratio, below proficiency is < 1.00, beginning proficiency is 1.00-1.99, and competency is 2.00.

Table 3 presents the results from the nonparametric Wilcoxon signed rank tests. Findings 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 participants had lower percentages in the CBT course (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 participants increased their percentage of complex reflections while enrolled in practicum (semester two median = 26.80 and semester three median = 52.27). 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) in the CBT course to
94.87 (SD=12.56) while in practicum. Two participants tied and three participants increased their percentages from semester one to three for MI adherent behaviors. Finally, there were no significant differences detected in percent open question or reflection-to-question ratios across the three semesters.

Table 3

*Group Means and Changes Between Semesters*

<table>
<thead>
<tr>
<th>Skill</th>
<th>Semester 1</th>
<th>Semester 2</th>
<th>Semester 3</th>
<th>Z</th>
<th>Z</th>
<th>Z</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>MI Spirit</td>
<td>4.57</td>
<td>0.29</td>
<td>4.22</td>
<td>0.27</td>
<td>3.95</td>
<td>0.25</td>
</tr>
<tr>
<td>% Open Questions</td>
<td>50.97</td>
<td>19.68</td>
<td>44.38</td>
<td>19.95</td>
<td>47.03</td>
<td>15.28</td>
</tr>
<tr>
<td>% Complex Reflect</td>
<td>44.77</td>
<td>16.26</td>
<td>22.95</td>
<td>11.80</td>
<td>42.28</td>
<td>19.91</td>
</tr>
<tr>
<td>% MI Adherent</td>
<td>84.15</td>
<td>16.21</td>
<td>68.98</td>
<td>19.15</td>
<td>94.87</td>
<td>12.56</td>
</tr>
<tr>
<td>R-Q ratio</td>
<td>0.94</td>
<td>0.35</td>
<td>0.64</td>
<td>0.10</td>
<td>0.72</td>
<td>0.32</td>
</tr>
</tbody>
</table>

Agenda -- -- 4.17 0.75 1.83 1.60 -- -1.903 --
Feedback -- -- 4.00 0.63 4.17 0.41 -- -0.577 --
Understanding -- -- 4.17 0.41 3.83 0.41 -- -1.414 --
Interpersonal -- -- 4.17 0.41 4.17 0.41 -- 0.000 --
Collaboration -- -- 4.17 0.41 3.67 0.52 -- -1.732 --
Pacing -- -- 4.00 0.63 3.50 1.05 -- -1.134 --
GuidedDisc -- -- 3.67 0.52 3.83 0.41 -- -0.577 --
KeyCog&Beh -- -- 4.50 0.84 3.50 1.05 -- -1.656 --
Strategy -- -- 4.00 0.63 3.50 0.84 -- -1.134 --
Application -- -- 4.17 0.75 3.17 1.33 -- -1.289 --
Homework -- -- 4.50 0.84 1.83 2.04 -- -1.826 --


* p < 0.05.

**CBT Competency**

From the CBT course, general therapeutic skills (agenda, feedback, understanding, interpersonal effectiveness, collaboration, and pacing) each had a median and mode score of 4 (Good) and mean scores ranging from 4.00 to 4.17. In conceptualization, strategy, and technique, participants scored highest in focusing on key cognitions and behaviors with a mean score of 4.5
Homework also had a mean score of 4.5 (SD=0.84) but had a median and mode of 4 (Good). The mean scores of the remaining skills were as follows: Application = 4.17 (SD=0.75), strategy = 4.00 (SD=0.63), and guided discovery = 3.67 (SD=0.52).

While enrolled in practicum, participants’ highest mean scores were in feedback and interpersonal effectiveness (both 4.17, SD=0.41), whereas the lowest mean score was in agenda setting (1.83, SD=1.60). Mean scores for understanding, collaboration, and pacing hovered between “satisfactory” and “good” (3.83, 3.67, and 3.50 respectively). Students mean scores ranged from 1.83 (SD=2.04) in homework to 3.83 (SD=0.41) in guided discovery. Focusing on key cognitions and behaviors, strategy for change, and application of CBT techniques hovered between “satisfactory” and “good” (3.50, 3.50, and 3.17 respectively). No significant differences were detected between semesters by the Wilcoxon signed rank tests, as displayed in Table 3.

**Discussion**

Overall, findings from this preliminary study show that counselor trainees can learn to practice two evidence-based practices, MI and CBT, with modest success while in their graduate training program. Further, students’ practice of MI and CBT was largely retained while they were enrolled in practicum, one semester after learning CBT and two semesters after learning MI. The significant decrease in students’ execution of the MI spirit between semesters one and three is noteworthy, although without any follow-up training in MI, a decrease in skill demonstration is consistent with the findings of previous MI training studies (Miller & Mount, 2001; Miller, Yahne, Moyers, Martinez, & Pirritano, 2004). Participants demonstrated competency in the MI global scores in each of the three semesters. However, students struggled to adopt some of the MI consistent skills including open questions, complex reflections, MI-
adherent behaviors, and using more reflections than questions. Interestingly, students improved in executing complex reflections and MI-adherent behaviors when they were enrolled in practicum (third semester).

Concerning CBT competency, in the CBT course students demonstrated “good” practice across the general therapeutic skills per the CTS. Students ranged from “satisfactory” to “very good” for focusing on key cognitions and behaviors, strategy for change, and application of CBT techniques. Scores for guided discovery ranged from “satisfactory” to “good” and for homework students scored in the range from “good” to “excellent.” While enrolled in practicum, although no significant differences were detected, students’ execution of setting the agenda, understanding, collaboration, pacing, focusing on key cognitions and behavior, strategy, application, and homework decreased. On the other hand, students’ execution of feedback and guided discovery increased.

**Study Limitations**

The small sample size and single cohort design limits the generalizability of this study, and as such, it is a preliminary study. In addition, participants’ skills were assessed using student role-plays and actors whereas, ideally, actual counseling sessions would be accessed to assess which approach(es) students were practicing with their clients. Further, participants were engaged in other coursework and supervision experiences, which likely impacted their counseling practice. Notwithstanding these limitations, this preliminary study offers implications and considerations.

**Implications and Considerations**

Given the potential benefits of using an integration of MI and CBT with broad range of clients, counselor educators may consider teaching this integration as part of counselor training
programs. How this training transpires warrants further consideration as teaching psychotherapy integration requires an investment of the faculty and training program (Norcross & Halgin, 2005). In the current study, MI was taught as part of a basic counseling skills course and CBT was of focus in its own course, and thus, these two approaches were taught separately with little continuity between courses. Moreover, participants were supervised by university and practicum site supervisors during the third semester, and this supervision was not specifically related to these two approaches. The findings of this study suggest that counselor trainees can be modestly successful in learning to execute an integration of these two approaches with this pedagogical method, yet retaining MI and CBT skills and integrating these two approaches was largely left up to the student, as specific training (e.g., practice feedback, supervision) was not provided beyond the courses in which the students learned these approaches. Alternative pedagogical methods warrant consideration and research is needed in this area. For example, a counselor training program might assess the impact of students learning these approaches in relation to each other or in a course in which psychotherapy integration is of focus. Further, assessment of the impact of supervision specific to the implementation of the EBPs and their integration on counselor trainee practice competence is needed.

Another area of consideration is whether or not this training is required or elective for students. In the current study, students were required to learn these approaches, leaving little room for students to explore other approaches in depth. As an alternative, faculty may allow students to choose the counseling approaches in which they wish to pursue training as opposed to choosing empirically supported treatments for them.

In addition to pedagogical methods, faculty resources is another essential consideration when teaching these EBPs, meaning faculty must have the desire and expertise to guide students
in learning the intricacies of each approach and their integration. Literature has documented counselor educators’ hesitancy to teach EBPs over more traditional counseling practices due to resistance to curriculum changes, perceived rigidity of EBPs, or lacking understanding and competence in EBPs (Patel et al., 2013; Wester, 2007; Whiston & Coker, 2000). Specific to the MI+CBT integration, counselor educators and supervisors would need to be able to help students resolve MI and CBT’s potential to conflict with each other as the client-centered components of MI can conflict with the directive components of CBT and the goals of treatment can differ between the approaches. For example, MI would focus on resolving ambivalence whereas CBT treatment might move ahead with behavior change despite the presence of unresolved ambivalence about change (Moyers & Houck, 2011). Students may benefit from specific guidance or decision rules pertaining to how to mitigate these potential conflicts (Moyers & Houck, 2011).

Overall, the results of this preliminary study showed that counseling students of this study were able to learn and demonstrate beginning levels of competence in MI and CBT across three semesters in their graduate training program. More research is needed to further inform the effectiveness of various pedagogical practices for teaching EBPs and psychotherapy integration in counselor education.
References


