

Training MI Interventionists across Disciplines

A Descriptive Project

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Abstract

Motivational Interviewing (MI) is a counseling approach that is versatile and can be applied in many professional settings. Therefore, teaching MI skills to multidisciplinary groups simultaneously has the potential to be quite beneficial for strengthening the MI skills of different groups. This paper describes a project in which professionals and students from psychology and nutrition/ dietetics were trained in MI in an attempt to bolster both groups' ability to implement MI as part of a larger health intervention project. Specifically, we outline the common themes that emerged among the trainees' experiences. Implementing a multidisciplinary training program in which trainees use their expertise and contribute to the training process appeared to have created a rich learning environment.

Keywords

motivational interviewing, training, education

Motivational Interviewing (MI) is a counseling approach that is person centered, collaborative and focused on eliciting and strengthening a client's motivation to change (Miller & Rollnick, 2013). Studied extensively since the early 1990s, MI has demonstrated efficacy with behaviors ranging from substance use (Lundhal & Burke, 2009) to promoting health behavior (Martins & McNeil, 2009). Efficacy for MI has been demonstrated as a stand-alone approach or when combined with other evidence based practices (Lundahl, Tollefson, Kunz, Brownell, & Burke, 2010) and with diverse populations (Hettema, Steele, & Miller, 2005).

Evidence is starting to emerge that MI can be taught to a wide variety of individuals from diverse training backgrounds and disciplines (Barwick, Bennett, Johnson, McGowan, & Moore, 2012; Madson, Loignon, & Lane, 2009; Söderlund, Madson, Rubak, & Nilsen, 2011). In fact, the literature is filled with studies examining MI training with substance abuse counselors (Schumacher, Madson, & Norquist, 2011), mental health clinicians (Schoener, Madeja, Henderson, Ondersma, & Janisse, 2006), criminal justice workers (Doran, Hohman, & Koutsenok, 2011), physicians (Mitchell et al., 2011) and medical students (Daepfen, Fortini, Bertholet et al., 2012), as well as other allied health workers (Brug et al., 2007). As a result, we are learning about how best to train clinicians from diverse professional

backgrounds in using MI in their respective professions. Further, with increased emphasis on cross disciplinary intervention and research, training MI simultaneously across multiple disciplines may be necessary to ensure better understanding of MI fidelity. Therefore, the MI training literature may benefit from developing and evaluating methods for training individuals from diverse disciplines together. Yet, we found no published research addressing MI training across divergent disciplines. The purpose of this paper is to describe an effort to simultaneously train health coaches from two different professional backgrounds (psychology and nutrition/dietetics) to deliver a motivational interviewing-based lifestyle intervention. We also sought to uncover potential themes as well as learn about the experiences of the trainees who participated in the MI training and subsequently the intervention.

DESCRIPTION OF LARGER PROJECT

This training was conducted as part of a larger project, HUB City Steps, aimed at reducing hypertension among African American individuals. The procedures followed in the HUB City Steps study were approved by the Institutional Review Board of The University of Southern Mississippi. Informed consent and a medical disclaimer were obtained from all participants upon enrollment into the study. The study was designed in two phases with an initial six months of intervention followed by 12 months of maintenance. The quasi-experimental intervention phase was designed to assess the effectiveness of the intervention on blood pressure as well as a variety of other clinical (e.g. lipids, glucose) and anthropometric (e.g. body mass index [BMI], waist circumference) outcomes. During this active phase, participants received social support provided by walking group volunteer leaders, motivational enhancement provided by intervention staff (health coaches), pedometer diary self-monitoring, and monthly education sessions. The randomized controlled trial maintenance phase was designed to assess the treatment effects of low versus high dose motivational enhancement delivered via telephone. During the 12-month maintenance phase, the low dose treatment arm

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received four additional telephone motivational enhancement sessions while the high dose treatment arm received 10 additional motivational enhancement sessions. A more detailed description of the HUB City Steps methodology can be found elsewhere (Zoellner et al., 2011; Zoellner et al., 2014).

Motivational Enhancement (ME) Sessions

ME sessions were based on the Motivational Enhancement Therapy protocol for motivational enhancement therapy (MET) used in Project MATCH (Miller, Zweben, DiClemente, & Rychtarik, 1992) with adaptations for using MET with health related behaviors (Rollnick, Miller, & Butler, 2008). The sessions focused on engaging participants in a lifestyle intervention and building motivation to change their eating and exercise behaviors. Participants received personalized feedback about various health factors such as weight, body mass index, blood pressure, and cholesterol level and were provided the opportunity to choose which areas of feedback they wanted to discuss with the ME health coach. Next, the ME health coach discussed the various health factors with the participant in a fashion that was consistent with the spirit and principles of MI. The goal of this interaction was developing an individualized change plan that the participant could implement. Health coaches used various MI-consistent strategies such as agenda setting, elicit – provide – elicit, evocative questions, decisional balance, and discussion of a menu of change options. The session concluded with the health coach eliciting participant commitment to the change plan.

Health Coaches

Five doctoral level psychology graduate students and three master's level registered dietitians were trained to provide intervention-tailored ME. Seven were female, two were African American and six White, with an average age of 28.1 (SD = 4.7). Health coaches had 2.1 (SD = 1.9) years of experience providing general clinical services. Prior experience with MI ranged from no previous exposure to two years of supervised practice. Psychology graduate student health coach trainees who had been previously trained in MI by the first author assisted in providing MI training to the group of health coaches.

MI Cross-Training

Training of health coaches was directed by the first author, a member of the Motivational Interviewing Network of Trainers (MINT), and followed suggestions offered by Madson, Loignon and Lane (2009). Trainees received 24 hours of direct training that included (a) pre-training readings, (b) didactic training, (c) experiential exercises and (d) feedback/coaching on the implementation of MI. The first eight hours of training focused on didactic presentation and skill building around the use of MI (principles, tenets, strategies). The second eight hours included information on nutrition counseling and important information related to study assessment results (e.g., normal and abnormal blood pressure), study protocols and more in-depth practice of skills. The final eight hours consisted of a review of study protocols and experiential exercises with observation, feedback, and coaching.

Pre-Training Readings

Health coach trainees were assigned several readings with the aim of providing foundational knowledge in the transtheoretical model, nutritional counseling, and motivational interviewing. These readings included: *Stages of change in clinical nutrition practice* (Molaison, 2002), *Your guide to lowering your blood pressure* (National Institutes of Health (NIH); 2006), *The transtheoretical model of behavior change* (Prochaska, Johnson, & Lee, 2009), *Assessing readiness for adherence to treatment* (Prochaska, Prochaska, & Johnson, 2006), *Motivational interviewing in*

healthcare (Rollnick et al., 2008) and the HUB City Steps Health Coach Manual (Madson, Bonnell, McMurtry, & Noble, 2009).

Didactic Training

Didactic instruction followed similar procedures to those discussed by Miller, Yahne, Moyers, Martinez, and Pirritano (2004) and Baer and colleagues (2004) and included nutrition and health information that health coaches would use for the study as well as an introduction to MI. Health coaches were provided with specific nutrition information (e.g., low salt diets), information about the clinical significance of data collected on participants (e.g., healthy and unhealthy blood pressure) and how to utilize these data in the feedback sessions. Registered dietitian health coach trainees assisted with providing didactic training in nutrition with consultation and oversight by the third author.

The counseling training program included an overview of the transtheoretical model; specifically, how to utilize stages of change to assess client readiness to change and to inform the use of MI. MI training involved exposure to (a) major tenets of MI (spirit, principles, OARS); (b) project-specific MI strategies (e.g. assessing readiness and importance, raising awareness, decisional balance, enhancing confidence, exploring goals & values); (c) developing a change plan; and (d) project protocols. Information about stages of change and MI tenets were provided by psychology trainees with consultation and guidance by the first author. All other MI and study information was provided by the first author. Teaching tools included written and PowerPoint materials developed specifically for the health coaches and demonstrations of the intervention in action through video and live demonstration.

Experiential Training

Health coaches participated in three types of experiential exercises aimed at developing skill in MI. First, during the didactic training, trainees completed various skill building exercises previously developed by Miller, Rollnick, and members of MINT (2004). These activities focused on building MI-consistent use of questions, affirmations, reflections and summaries. Next, after learning about specific MI-consistent strategies, health coaches practiced the strategies in triads where they served as a client, clinician, and observer. Finally, the health coaches completed three audiotaped mock counseling sessions that followed study protocols (Madson et al., 2009). These experiences provided the health coaches an opportunity to practice newly learned skills as well as receive feedback on how to modify the skills to be more MI-consistent, as feedback has been found to be effective in facilitating integration of MI (Miller et al., 2004). All sessions were reviewed by the other health coaches and the first author and were discussed in small group supervision. The purpose of this review was to assess clinician fidelity to MI and to ME protocols and to provide formative feedback aimed at enhancing MI skills.

METHODS

As the goal of this project was to better understand the experiences of the MI trainees, an adaptation of the phenomenological approach to data collection and analysis was used. In this approach, researchers (a) develop questions aimed at understanding the experience of the group under investigation, (b) obtain a sample of participants based on their having experienced the phenomena under study and their ability to articulate it, (c) use the questions to gather information about participants experiences and (d) analyze the data gathered to understand the essence of the experiences (Wang, 2008). Open-ended questions to assess trainees' experiences were developed by the authors and revised through multiple iterations of review. Questions were developed in a parallel fashion; for example, psychology students were asked "how training

dietitians in MI helped you to better learn and apply MI as part of the HUB City Steps project” while dietitians were asked “how *teaching* psychology students about nutrition/health helped you better learn and apply MI as part of the HUB City Steps project.”

Six trainees were contacted via e-mail and asked to complete the questionnaire and return it to the researchers in an e-format (e-mail). Upon receipt of the responses, documents were de-identified and responses were separated in two groups to delineate between nutrition and psychology trainees. Participant responses to the open-ended questions were reviewed independently by the second and third author and were grouped according to evolving themes, to establish possible analytical concepts and categories. These two authors then combined their coding of participant responses to identify convergent concepts and categories.

RESULTS

Trainee Opinions of Cross-Training

Two of the three psychology trainees reported that training others enhanced their own knowledge of MI because of the social desirability to have a good grasp of the information in order to be able to teach it to another group. While one of the nutrition trainees felt a similar desire to have a good foundation in order to teach, the others felt that the training provided them with the opportunity to serve as a content expert in their discipline. In regard to the value of receiving training from the opposite group, the psychology students responded that the training by nutrition professionals not only helped to provide consistency in the content information, but also ensured that the information provided was accurate and reliable. One participant noted, “Learning the necessary information from those who know it best (dietitians) was the best route to take.”

All of the dietitians felt that getting training from the psychology students was essential in improving the skills needed to implement MI as part of the intervention. Some of the skills they noted included listening without judgment, allowing trainees to set goals, and evoking responses from participants. The participating dietitians had been trained previously under more traditional standards that required greater emphasis on providing education but less emphasis on enhancing motivation and counseling of clients. More recently, the Accreditation Council for Education in Nutrition and Dietetics (ACEND) has required accredited dietetics programs to adhere to standards that explicitly state education on behavior change theory and practicing effective communication techniques is essential (ACEND, 2012, pp. 55-56).

Receiving Training from Individuals with Different Backgrounds and Perspectives

Being exposed to individuals with a different education background and perspective on health education allowed the psychology trainees to learn new content or expand their knowledge of nutrition. In regards to being exposed to a different perspective, one trainee wrote “blending and merging of two philosophies, and therefore, trainees received an enhanced experience.” Further, one trainee noted the importance of the collaboration that existed when being trained by nutrition professionals. The dietitians were similar in that they felt that the training allowed them to gather new knowledge. However, the dietitians differed from the psychology group, as no dietitian noted an expanded knowledge of nutrition. The dietitians did, however, report an expanded knowledge in counseling techniques; for example, one respondent said “I learned things that I had never been taught before in my discipline.”

Preparation for Community-Based Intervention

Trainees were also asked in what ways they were prepared or unprepared for MI counseling in a community based research setting. The

psychology group felt they had the basic knowledge and skills of MI, and one noted adequate training in research. However, one psychology trainee noted feeling unprepared in the area of nutrition knowledge. As the participant noted, one area lacking in preparation for the research project was specifically the “complex nutrition questions.” The nutrition group answered similarly in that they felt prepared in their own content area (nutrition). However, it is interesting to note that the dietitians felt unprepared in more than just knowledge of MI, but the lack of preparation extended to counseling skills in general and dealing with changing eating behaviors. Dietitians are typically not accustomed to spending a great deal of time with individual clients and generally provide educational information rather than intensive lifestyle counseling; therefore, the dietitians may have been unprepared to serve in a role as a health coach. One dietitian noted, “These sessions would just suck energy from me because I didn’t feel equipped to deal with the psychology of eating.”

When asked how their discipline-specific training differed from training received as part of a community-based participatory intervention project, both groups noted that their formal, discipline specific training lacked the experiential component that this health coach training provided. As one psychology trainee noted, “[the training] consisted of a balance of didactic training, role-plays (in both group and individual settings), and supervision based on recorded role-plays.” While no specific comments were made regarding the expansion of knowledge because of role plays or supervision, the overall in-depth experience seemed to have an impact as another individual in the psychology group noted that this type of training allowed for the combination of information, so that the traditional MI training was combined with new knowledge (i.e. nutrition). While the nutrition group had similar responses relating to the experiential component of the training, they also commented that the small group was beneficial to learning so they could focus on what needed to be learned. Another noted the training was more about “counseling” instead of “education,” which expands on the traditional nutrition-related curricula as mentioned previously. The collaboration between the two groups was seen as most beneficial by a different dietitian who said, “We were able to learn from people of a different discipline and vice versa.”

DISCUSSION

To our knowledge this is the first published account of an attempt to cross train individuals from dissimilar professional backgrounds and as such highlights the need for further examination. As the need for cross disciplinary collaboration to address complex health issues – i.e., health behavior change – increases, so will the importance of cross training providers. Lifestyle change interventions may require individuals from different disciplines to better understand aspects of another discipline in order to effectively provide comprehensive and effective clinical interventions. For example, in HUB City Steps, psychology graduate students who were trained to provide psychological services needed to understand how to adapt these services as part of a healthy lifestyle intervention, whereas dietitians who were trained to provide nutrition counseling needed to understand adapting these services to focus more on enhancing internal motivation. Although the HUB City Steps intervention included multiple intervention components, its success in achieving positive health outcomes (Zoellner et al., 2011; Zoellner et al., 2014) provides some evidence, though not definitive, that cross-disciplinary training of MI interventionists might contribute to such outcomes.

As the need for cross disciplinary intervention increases (Irby, Kaplan, Garner-Edwards, Kolbash, & Skelton, 2010), and given the applicability of MI across a wide array of behavioral problems, alternate MI training models may be needed. More specifically, to build cross discipline collaborations, MI training models may need to pull from the strengths of multiple disciplines in order to design comprehensive training programs

utilizing various discipline-specific forms of expertise to create a richer understanding and competency in using MI.

The purpose of this project was to describe a cross disciplinary training program to prepare health coaches in providing motivational enhancement. In particular, we combined current MI training recommendations with the expertise of trainees to implement a shared learning environment. In essence, we elicited strengths from trainees in each discipline (counseling psychology and dietetics) to train these individuals as health coaches who were well-rounded in the application of MI to health behaviors. Although this project does not provide outcome evaluation of the training program, several common and valuable points were gleaned from trainees that can inform future cross training projects.

Based on trainee responses, it appears that the training experience was generally favorable and that trainees found their learning was more meaningful because they utilized their expertise and professional background to provide part of the training. In other words, the training for psychology students, who had MI knowledge and skill, was enhanced as they learned about applications of MI from the dietitians and at the same time helped the dietitians learn how to use their nutritional expertise within the framework of MI. Similarly, the dietitians found value in helping the psychology trainees learn how to adapt their use of MI to integrate nutritional information. More specifically, the training became more meaningful because all trainees were trainers as well as trainees and making MI more applicable to their discipline as well as another reinforced relevance. Similarly, trainees from both groups indicated that the skills they already possessed were improved during the training. Psychology trainees tended to report that their skills in MI improved as a result of teaching and the information provided by the nutrition trainees helped them give more detailed feedback related to the goals of the intervention. Nutrition trainees indicated that their role in training was to be a content expert in nutrition and being trained by psychology trainees allowed them to enhance their skills as a counselor. Collectively, it appears as though the training experiences for both groups were enriched by the cross disciplinary nature of the training.

Our findings raise some points for training consideration. First, MI trainers might benefit from intentionally designing trainings that are cross-disciplinary in nature. By doing this, trainers can also then develop training procedures, such as those described above, that evoke the different expertise of trainees to create a richer training environment. Further, MI trainers in multidisciplinary environments may develop cross-disciplinary training groups to foster the sharing of specialty expertise within the context of MI use. The value of MI training and support groups has been highlighted by Wood, Ager and Wood (2011). Within the context of multi-disciplinary MI training and support groups, trainers could design activities where trainees from different disciplines could learn to share their expertise in MI consistent ways. Our findings, specifically the responses of the dietitians, emphasize the importance for greater integration of training in MI and general counseling approaches; particularly training that incorporates experiential exercises, into the pre-degree curricula for allied health professionals, such as dietitians. Trainings such as this may enable these individuals to feel better equipped to engage patients in behavior change discussions. Similarly, integration of greater content-specific training in important behavior change areas such as nutrition, exercise, alcohol problems, and smoking cessation into the pre-degree training of psychologists and other counseling professionals may enable these professionals to more broadly apply their skill in MI and general counseling to a wide range of important behavior change issues (Madson, Schumacher, Noble, & Bonnell, 2013). Thus, training environments could be developed with the goal of “cross-training” future health care professionals.

Our findings also highlight several points for research consideration. A limitation of this project was the lack of training outcome evaluation. Before any definitive statements about the value of cross training models, such as the one described here, can be made, efficacy evaluations are needed. In particular, it would be important to assess the changes in MI competence as well as specific applications of MI to behavior change targets. Beyond outcome evaluation, more rigorous qualitative evaluation is needed that may identify how particular aspects of the cross-training (e.g., integrating discipline expertise with MI information) enhance trainees’ knowledge of MI and how it may be applied within a particular discipline. Additionally, assessment of various moderators and mediators, such as changes in trainee confidence, attitudes and intention to use MI, which may influence or explain training outcomes, would be valuable. For instance, a question might be “to what degree do changes in attitude toward MI during a cross training moderate skill development?”

In sum, our primary purpose was to describe an MI training program that was cross disciplinary and elicited the expertise of two diverse training groups. We also sought to outline common themes among the experiences of the trainees. In general, it appears that a multidisciplinary training program in which trainees use their expertise and contribute to the training process created a rich learning environment.

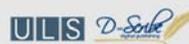
REFERENCES

- Accreditation Council for Education in Nutrition and Dietetics. (2012). 2012 Standards for Didactic Programs in Nutrition and Dietetics. <http://www.eatright.org/ACEND/>
- Baer, J.S., Rosengren, D.B., Dunn, C.W., Wells, E.A., Ogle, R.L., & Hartzler, B. (2004). An evaluation of workshop training in motivational interviewing for addiction and mental health clinicians. *Drug Alcohol Dependence*, 73, 99–106.
- Barwick, M.A., Bennett, L. M., Johnson, S. N., McGowan, J., & Moore, J. E. (2012). Training health and mental health professionals in motivational interviewing: A systematic review. *Children and Youth Services Review*, 34, 1786-1795.
- Brug, J., Spikmans, F., Aartsen, C., Breedveld, B., Bes, R., & Fereira, I. (2007). Training dietitians in basic motivational interviewing skills results in changes in their counseling style and in lower saturated fat intakes in their patients. *Journal of Nutrition Education and Behavior*, 39, 8-12. doi:10.1016/j.jneb.2006.08.010
- Daepfen, J., Fortini, C., Bertholet, N., Bonvin, R., Berner, A., Michaud, P., & ... Gaume, J. (2012). Training medical students to conduct motivational interviewing: A randomized controlled trial. *Patient Education and Counseling*, 87, 313-318. doi:10.1016/j.pec.2011.12.005
- 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*, SARC SUPPL 719-26. doi:10.1080/02791072.2011.601986
- Hettema, J., Steele, J., & Miller, W. R. (2005). Motivational interviewing. *Annual Review of Clinical Psychology*, 1, 91-111. doi:10.1146/annurev.clinpsy.1.102803.143833
- Irby, M., Kaplan, S., Garner-Edwards, D., Kolbash, S., & Skelton, J. A. (2010). Motivational interviewing in a family-based pediatric obesity program: A case study. *Families, Systems, & Health*, 28, 236-246. doi:10.1037/a0020101
- Lundahl, B., & Burke, B. L. (2009). The effectiveness and applicability of motivational interviewing: A practice-friendly review of four meta-analyses. *Journal of Clinical Psychology*, 65, 1232-1245. doi:10.1002/jclp.20638

- Lundahl, B. W., Tollefson, D., Kunz, C., Brownell, C., & Burke, B. (2010). Meta-analysis of Motivational interviewing: Twenty five years of research. *Research on Social Work Practice, 20*, 137-160.
- Madson, M. B., Bonnell, M. A., McMurtry, S., & Noble, J. (2009). *HUB City STEPS – motivational interviewing counselor manual*. Unpublished manual. The University of Southern Mississippi.
- Madson, M. B., Loignon, A. C., & Lane, C. (2009). Training in motivational interviewing: A systematic review. *Journal of Substance Abuse Treatment, 36*, 101-109. doi: 10.1016/j.jsat.2008.05.005
- 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.
- Martins, R. K., & McNeil, D. W. (2009). Review of motivational interviewing in promoting health behaviors. *Clinical Psychology Review, 29*, 283-293. doi: 10.1016/j.cpr.2009.02.001
- Miller, W. R., & Rollnick, S. (2013). *Motivational interviewing: Helping people change* (3rd ed.). New York: 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*, 1050-1062. doi: 10.1037/0022-006X.72.6.1050
- Miller, W.R.; Zweben, A.; DiClemente, C.C., & Rychtarik, R.G. (1992). *Motivational Enhancement Therapy Manual: A Clinical Research Guide for Therapists Treating Individuals With Alcohol Abuse and Dependence*. Project MATCH Monograph Series, Vol. 2. NIH Pub. No.94-3723. Rockville, MD: National Institute on Alcohol Abuse and Alcoholism.
- Mitchell, S., Heyden, R., Heyden, N., Schroy, P., Andrew, S., Sadikova, E., Wiecha, J. (2011). A pilot study of motivational interviewing training in a virtual world. *Journal of Medical Internet Research, 13*, 277-286. doi:10.2196/jmir.1825.
- Molaison, E. F. (2002). Stages of change in clinical nutrition practice. *Nutrition in Clinical Care, 5*, 251-257.
- Motivational Interviewing Network of Trainers. (2004). Motivational interviewing training for new trainers. Resources for trainers. Unpublished manual. Retrieved from: www.motivationalinterview.org.
- National Institutes of Health. (2006). Your guide to lowering your blood pressure with DASH. U.S. Department of Health and Human Services. http://www.nhlbi.nih.gov/health/public/heart/hbp/dash/new_dash.pdf
- Prochaska, J. O., Johnson, S., & Lee, P. (2009). The transtheoretical model of behavior change. In S. A. Shumaker, J. K. Ockene, & K. A. Riekert (Eds.), *The Handbook of Health Behavior Change* (3rd Edition, pp. 59-83). New York: Springer.
- Prochaska, J. M., Prochaska, J. O., & Johnson, S. S. (2006). Assessing Readiness for Adherence to Treatment. In W. T. O'Donohue, E. R. Levensky (Eds.), *Promoting treatment adherence: A practical handbook for health care providers* (pp. 35-46). Thousand Oaks, CA US: Sage Publications, Inc.
- Rollnick, S., Butler, C., & Miller, W. R. (2008). *Motivational interviewing in health care: Helping patients change behavior*. New York: Guilford Press.
- Schumacher, J. A., Madson, M. B., & Norquist, G. (2011). Using tele-health technology to enhance motivational interviewing training for rural substance abuse treatment providers: A services improvement project. *The Behavior Therapist, 34*, 64-70.
- Schoener, E. P., Madeja, C. L., Henderson, M. J., Ondersma, S. J., & Janisse, J. J. (2006). Effects of motivational interviewing training on mental health therapist behavior. *Drug and Alcohol Dependence, 82*, 269-275. doi:10.1016/j.drugalcdep.2005.10.003
- Söderlund, L. L., Madson, M. B., Rubak, S., & Nilsen, P. (2011) A systematic review of motivational interviewing training for general healthcare practitioners. *Patient Education and Counseling, 84*, 16-26.
- Wang, Y. (2008). Qualitative research. In Heppner, P. P., Wampold, B. E., & Kivlighan, D. M. (Eds.). *Research design in counseling* (2nd ed.). Belmont, CA: Thompson Publishing.
- Wood, A. R., Ager, R. D., & Wood, R. J. (2011). Motivational interviewing: A qualitative examination of factors impacting adoption and implementation in a community wide setting. *Journal of Social Work Practice in the Addictions, 11*, 336-351.
- Zoellner J. M., Connell C. C., Madson M. B., Yadrick, K. (2011). H.U.B City Steps: Methods and early findings from a community-based participatory research effectiveness trial to reduce blood pressure among African Americans. *International Journal of Behavioral Nutrition and Physical Activity, 8*, 59-71.
- Zoellner, J. M., Connell, C., Madson, M. B., Yadrick, K. (2014). HUB City Steps: A 6-month lifestyle intervention improves blood pressure and psychosocial constructs among a primarily African American community. *Journal of the Academy of Nutrition and Dietetics, 114*, 603-612.



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