



AN ABSTRACT OF THE DISSERTATION OF

Carla Stewart-Donaldson for the degree of Doctor of Philosophy in Counseling presented on August 13, 2012.

Title: The Impact of Motivational Interviewing Feedback and Coaching on School Counseling Graduate Students' Motivational Interviewing Skills

Abstract approved: \_\_\_\_\_

Kathy E. Biles, PhD

School counselors have potential to make significant gains in closing the achievement gap for all students as advocated for by the American School Counseling Association. School counseling is moving away from the no-model model of services delivery that places counselors at the whim of principals, parents and teachers who traditionally define counseling duties according to their needs. Instead, it is moving toward a school counseling framework advocated for by national and state organizations. A core concept of these frameworks is the use of evidence-based practices to meet the needs of all learners. Motivational Interviewing (MI) is an evidence-based counseling practice developed to assist with resolution of ambivalence and behavior change. Researched throughout the world in a variety of settings from the health professions to prisons, the results show promise in MI for assisting with behavior change in both adult and adolescent populations. MI training is currently available to school counselors at conferences, school district trainings and through self-study. There is little research on the efficacy of MI and school counseling training and implementation. The purpose of this dissertation is to produce two manuscripts related to school counseling and MI.

Using a concurrent multiple baseline design, this study focused on the impact of MI feedback and coaching supervision of school counseling graduate students ( $N=3$ ) with previous beginning MI training in a two day workshop. The hypothesis stated that subsequent feedback and coaching supervision improved school counseling graduate students' global rating scores and improved the percentage of MI adherent behavior on the Motivational Interviewing Treatment Integrity (MITI 3.1). The global rating scores increased with feedback and coaching supervision and the participants moved from levels of beginning MI competency to proficiency in their mean scores. Participants did not, however, increase the percentage of MI adherent behavior. These score began high and remained high throughout the 10 week duration of the research. Implications for this study include highlighting the importance of feedback and coaching supervision for school counseling graduate students wanting to increase beginning MI skills, and it marks the beginning of research on training and implementing MI in school counseling programs.

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The Impact of Motivational Interviewing Feedback and Coaching on School Counseling  
Graduate Students' Motivational Interviewing Skills

by  
Carla Stewart-Donaldson

A DISSERTATION

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August 13, 2012

APPROVED:

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Dean of the Graduate School

I understand that my dissertation will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my dissertation to any reader upon request.

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Carla Stewart-Donaldson, Author

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## CHAPTER 1

### General Introduction

### Dissertation Overview

The purpose of this dissertation is to demonstrate scholarly work using the *manuscript document dissertation format* as outlined by the Oregon State University Graduate School. Chapter one describes how the two journal-formatted manuscripts found in chapters two and three are thematically tied and build toward research conclusions pertinent to school counseling and Motivational Interviewing (MI). Chapter two is an article titled, *A Review of the Literature on Motivational Interviewing and School Counseling*, and chapter three presents quantitative research in a manuscript entitled, *The Impact of Motivational Interviewing Feedback and Coaching on School Counseling Graduate Students Trained in Motivational Interviewing*. Both of these manuscripts focus on school counseling practice and using the practice of Motivational Interviewing. The manuscripts converge thematically on Motivational Interviewing, ethical practices in school counseling, and the impact of subsequent MI feedback and coaching supervision on the MI skills of school counseling graduate students trained in beginning Motivational Interviewing.

Specifically, the first scholarly manuscript of this dissertation is a literature review providing background, definitions, and the theoretical underpinnings of Transformed School Counseling Programs. It also stresses ethical imperatives of 21<sup>st</sup> Century School Counseling practices and the history and theoretical underpinnings of current research, practices, and training in Motivational Interviewing. In addition, it

reviews research implicating the benefits of training school counselors in Motivational Interviewing and the potential benefits to schools as an evidence-based counseling intervention. Chapter three presents the results of quasi-experimental research on the impact of subsequent feedback and coaching supervision on the MI skills of school counseling graduate students trained in beginning Motivational Interviewing. Chapter four presents a general conclusion to this dissertation and suggestions from the review of the literature. The concluding research provides information for school counselors regarding the impact of subsequent feedback and coaching supervision and increased counselor MI skills.

Motivational Interviewing is a collaborative dialogue between counselor and client that encompasses and outlines a client's difficulties and mixed feelings about a targeted behavior change. It is considered a therapeutic process intended to explore and recognize possibilities for engaging in a new more effective behavior based on the client's values and goals (Miller & Moyers, 2006; Naar-King & Suarez, 2011). Empirical evidence suggests that Motivational Interviewing has shown effective results with a broad range of adult behavioral-change problems (Rosengren, 2009; see also Miller & Rollnick, 2002; Miller & Rose, 2009). In recent years, MI has been researched in a variety of adolescent settings with beneficial results. These adolescent settings include eating disorders, obesity prevention, substance abuse, sexual risk reductions, smoking cessation, and HIV prevention, as well as juvenile justice settings (Naar-King & Suarez). Little research on training school counselors, especially in school settings, can be found in a review of the literature.

Implications for the scholarly body of knowledge include adding to the knowledge of MI training which includes subsequent feedback and coaching supervision. Second, expanding this knowledge to include the impact of feedback and coaching supervision of graduate students in school counseling on MI skill improvement. Finally, implications will include the potential of implementing MI training as an evidence-based practice in school counseling programs.

### Thematic Introduction

The purpose of this dissertation study is to explore the impact on school counselors, trained in a beginning Motivational Interviewing (MI) workshop, when MI feedback and coaching supervision sessions are provided subsequent to an initial MI training workshop. MI is a collaborative, client-centered, process of counseling used to evoke and reinforce motivation for behavioral change (Miller & Rollnick, 2002). These manuscripts converge on the history and construct of current ethical school counseling practices, MI history and research, and the impact of subsequent feedback and coaching supervision over time on school counseling graduate students' MI skills. Two important components of this theme are the impact on school counselors of MI feedback and coaching supervision and ethical implementation of MI in school counseling programs.

The process of implementing Motivational Interviewing in school counseling programs was chosen as the focus of this research because of its potential relevance for meeting the current demands of 21<sup>st</sup> Century School Counseling (American School Counseling Association [ASCA], 2005). Published studies of MI have been applied to a broad range of adult behavior change problems (Hartzler, Baer, Dunn, Rosengren, &



Wells, 2007; Miller & Rollnick, 2002). However, MI has only recently been used with adolescent populations in research, revealing beneficial results (Naar-King & Suarez, 2011).

As MI has demonstrated promising results in many aspects of the health care field, it certainly may have potential value for the field of school counseling. This is noteworthy, as the demands for school counseling interventions to meet the needs of all learners with evidence-based practices have exponentially grown in the recent past (ASCA, 2005).

Typical in many areas of the counseling and school counseling fields, expertise is required for using interventions in work with specific populations (American Counseling Association [ACA], 2005, A.9b, C.2.a); American School Counselor Association [ASCA], 2005, E.1a, E.1b, E.1f.). As new interventions are adopted in school counseling practices, appropriate education, training and supervision are important before implementing the intervention (ACA, 2005, C.2.b).

Pursuing research to evaluate the effectiveness of MI for the field of school counseling could lead to implementation of evidence-based practice of MI in the school counseling field. As such advances occur, it is imperative that school counselors receive skills training, instruction, feedback and coaching supervision to ensure maintenance and adherence to the spirit and style of MI.

### Brief Introduction to Motivational Interviewing

According to Miller, Yahne, Moyers, Martinez, and Perritano (2004), research on training in MI reveals follow-up feedback and coaching supervision, subsequent to a

beginning MI workshop, is recommended for increasing and maintaining MI skills. According to research, it is important for MI counselors desiring to impact behavior change to strive for and maintain MI skills with subsequent feedback and coaching supervision over time (Hartzler et al., 2007).

A central theme of this dissertation is defining and exploring the process of Motivational Interviewing. William Miller initially developed the idea of Motivational Interviewing in 1983 as an intervention for problem drinking (Miller & Rollnick, 2002). Promising therapeutic applications of MI have since expanded to include training and research in a variety of health related settings. Today MI is used throughout the world to assist clients and patients with behavior change.

The premise of MI is that targeted behavior change emerges from a process of specific, varied tasks to understand a client's process of behavior change (Rollnick, Butler, Kinnnersley, Gregory, & Mash, 2010). The change can involve the initiation, modification or cessation of a particular behavior, choice, attitude, resolution or acceptance (Miller & Rollnick, 2002; Miller & Rose, 2009).

MI research continues to be published, yet the research is sparse regarding MI in the school setting (Kittles & Atkinson, 2009; McNamara, 2009). According to Biles and Eakin (2011), MI training is offered for school counselors at conferences and through school district in-service trainings. A review of the literature, however, reveals little about the process of MI skill acquisition for school counselors or impact of feedback and coaching supervision on school counselors' MI skills.

### Glossary of Terms

Ambivalence: The process of having mixed feelings about making a change; sometimes wanting to change, other times not wanting to change (Miller & Moyers, 2006; Miller & Rollnick, 2002).

American School Counseling Association (ASCA): The professional organization for school counselors in the United States (ASCA, 2005).

ASCA National Model: Defines a vision and goals for comprehensive school counseling through a foundational framework of delivery, management, and accountability for program-centered counseling services for every student (ASCA, 2005).

Change Talk: Client verbalizations, key to resolving ambivalence expressing desire, ability, need, or commitment to change (Amerhein, Miller, Yanhe, Palmer, & Fulcher, 2003).

Closing the Achievement Gap: Providing equal educational opportunities for every student regardless of their socio-economic status, especially for students from underrepresented backgrounds (Dahir & Stone, 2012).

Commitment Language: Behavior change only occurs if change talk (desire, ability, need) is followed by client expression of commitment to change (Miller & Moyers, 2006).

Eliciting: Counselors learn how and when to reflect and ask questions of clients that extract change and commitment talk from the client (Miller & Moyers, 2006).

Four Processes of Motivational Interviewing: Engaging, creating an empathetic relationship; Focusing, identifying a change goal; Evoking, change talk and commitment

language; Planning, goal setting, arriving at a plan eliciting commitment (Miller & Moyers, 2006).

No Child Left Behind Act (NCLB): The primary federal statute defining government's role in education since 2000 (Dahir & Stone, 2012).

OARS: Basic client-centered counseling skills used in Motivational Interviewing. The OARS are open-ended questions, affirmations, reflection, and summarizing (Miller & Moyers, 2006).

Reflection: A simple acknowledgment of the client's "disagreement, feeling, or perception can permit further exploration rather than continued defensiveness" (Miller & Rollnick, 2002, p. 100).

Resistance: Often a client's reaction to the counselor's behavior when the client responds with counter-change arguments decreasing the possibility of change, "the more a client argues against change the less likely that a person will change" (Miller & Rollnick, 2002, p. 9).

Righting Reflex: The human desire to set things right when there is a perceived discrepancy between how things are and how they should be (Miller & Rollnick, 2002).

Rolling with Resistance: MI-consistent ways for responding to client resistance include counselor's use of reflections including simple reflections, amplified reflections, and double-sided reflections.

Self-efficacy: A client's faith and hope that change will occur; a good predictor of whether change will occur (Miller & Rollnick, 2002).

Spirit of Motivational Interviewing (MI): A way of being with a client where the

counselor suspends disbelief and is actively curious about the client's perspective.

Taking the point of view that clients have what they need rather than taking a deficit perspective (Miller & Moyers, 2006).

Transtheoretical Model of Change (TTM): The idea that intentional human behavior change moves through a process of specific, task oriented stages of change. The stages include the pre-contemplation stage, before a person is considering change; the contemplation stage; the action stage; the maintenance stage; and sometimes a relapse and recycling stage. (DiClemente & Velasquez, as cited in Miller & Rollnick, 2002).

CHAPTER 2

A Review of the Literature on School Counseling  
and Motivational Interviewing

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### Abstract

This manuscript reviews the Motivational Interviewing literature and current literature and practices pertaining to school counseling. Current school counseling practices examined in this manuscript include those advocated for by the American Counselor Association (ASCA, 2005), the Transforming School Counseling Initiative (Education Trust, 1997), and the Broader, Bolder Approach (Steen & Noguera, 2011). In addition to a review of the literature on school counseling, this manuscript reviews the Motivational Interviewing counseling process, research related to learning Motivational Interviewing, and the literature regarding the use of Motivational Interviewing with adolescents. Finally, it concludes with the implications of using Motivational Interviewing as a data-driven school counseling intervention to meet the demands of school counseling in the 21<sup>st</sup> Century.

## Introduction

School counselors are challenged to use therapeutic school interventions that enhance a sense of well-being and enhance the quality of life in school settings (Atkinson & Woods, 2003; McNamara, 2009). A review of the literature reveals a 21<sup>st</sup> Century imperative for school counselors to act as advocates and agents for closing the achievement gap. Dahir and Stone (2012) contended that, “Advancing the moral dimensions of school to include a strong social justice agenda to ‘close the gap’ especially for diverse populations of students who have been traditionally underrepresented” (p. 26). The National Center for Education Statistics (2008) reported that only 58% of the low-income-family high school students reported enrolling right after high school and 10% earned a bachelor’s degree by age 24 in 2006 (Dahir & Stone).

According to Suh, Suh, and Houston (2007), academic achievement is directly linked to attendance; absenteeism is a significant predictor for dropping out. School attendance is one of the most critical issues facing schools today (Gysbers, 2004; Noguera, 2008). Surprisingly, little research focuses on what schools can do to increase attendance (Gysbers, 2004). Schools must explore effective strategies for connecting with students and adopt interventions for encouraging systems and students to explore behavior and attitudes leading to behavior change (Suh et al.).

Attendance problems range from avoidance of fear and escape from social situations to attention-seeking behavior, or from a belief that seeking an education is unimportant (Noguera, 2008; Peligrini, 2007). For a majority of students, attendance and school engagement are the most significant aspects of academic learning. The impact of



student attendance is recognized as a huge contributor to student achievement; student attendance is a measure used to account for effective schools (U. S. Department of Education [USDOE], 2001) and school counseling programs. Yet, school counselors receive little on-going training and supervision with interventions focused on increasing student attendance and engagement (Gysbers, 2004; Lambie, 2004; Rubenstein & Zager, 1995).

According to Noguera (2008), school counselors enjoy the privilege of frequent opportunities to impact school climate by debunking cultural stereotypes and encouraging students to pursue academic and extracurricular opportunities and interests not traditionally associated with their cultural group. The honor of helping students understand what it means to be who they are and understanding, with empathy, the context of students' worlds can make a difference in whether or not they reach their academic goals (Noguera).

Motivational Interviewing (MI) is known as a non-confrontational form of counseling that uses client-centered counseling skills in a strategic, collaborative manner (Rogers, 1959). In addition, MI is considered directional, as the collaboration process becomes focused on targeted behavior change elicited from the client. MI helps clients understand why and how they might change (Rollnick, Butler, Kinnersley, Gregory, & Mash, 2010). It is a way for clients to explore and recognize possibilities for engaging in different behavior, based on the clients' values and goals (Naar-King & Suarez, 2011).

The premise of MI is that targeted behavior change emerges from a process of completing incremented, specific, varied tasks; this process provides the framework for

understanding the client's procedure for individual behavior change (Rollnick et al., 2010). Behavior change can involve the initiation, modification, or cessation of a particular behavior, choice, attitude, resolution, or acceptance (Miller & Rose, 2009; Rosengren, 2009).

Initially developed in 1983, as a brief intervention for problem drinking, therapeutic applications of MI have since expanded to include training and research in a variety of health related fields (Ginsburg, Mann, Rotgers, & Weeks, 2002; Miller & Rose, 2009). Published studies of MI have been applied to a broad range of adult behavior change problems (Miller & Rose, 2009; Rosengren, 2009), and in recent years, MI has been used with adolescent populations and researched in a variety of settings with beneficial results (Naar-King & Suarez, 2011).

School counselors have potential to make significant gains in closing the achievement gap for all students by moving toward evidence-based school counseling practices. Motivational Interviewing (MI) is an evidence-based counseling practice researched throughout the world showing promise for assisting with behavior change in adolescent populations. Although MI training is currently available to school counselors, there is little research on the efficacy of MI and school counselor training and implementation. This manuscript examines the literature related to school counseling and MI and explore its potential for implementation school counseling settings.

### School Counseling

School counselors are mandated by federal, state, and local entities to close the graduation and achievement gaps existing in our schools while promoting post-secondary

attainment throughout the K-12 system. School counselors and students are in jeopardy of being “left behind” unless evidence-based practices are implemented to increase engagement, enabling school counselors to meet the needs of students from at risk populations (ASCA, 2005).

In compliance with the No Child Left Behind Act of 2001 (USDOE, 2001), states throughout the nation have adopted standards designed to hold educators and students accountable for their learning. As the U. S. economy restructured in the 1980’s, preparing students for postsecondary training to meet the demands of a global economy became the expectation (Dahir & Stone, 2012; Education Trust, 1997). High school completion today is the minimum standard for exiting the cycle of poverty (Dahir & Stone).

According to Glass and Rose (2008), students who drop out, not only limit their individual prospects for the future, they impact society economically, because they are more likely to be incarcerated, unemployed, or live in poverty (Glass & Rose). Underachievement and failure to complete high school continues to be of great concern to school districts and society (Chukwu-etu, 2009). School districts are held accountable financially by current local, state, and national educational policies for students identified with high absenteeism, underachieving students, and students who fail to complete high school (Railsback, 2004). Adolescents experiencing disengagement in school are more likely to be truant, suffer academically, and disrupt the educational environment of their peers (Kittles & Atkinson, 2009). The cost of disengagement for individuals and society is high (Dahir & Stone, 2012).

School counselors are positioned well to provide students with opportunities to recognize the impact of their choices; however, they must have training and supervision in evidence-based practices to understand and employ effective counseling skills and techniques necessary for assisting students with understanding the implications of their life choices (ASCA, 2005). Knowledge and strategies to counter injurious student behavior must become a standard and the status quo for daily practice of ethical school counseling (Noguera, 2008; Steen & Noguera, 2011).

### History of School Counseling

“The history of school counseling is depicted as a profession in search of an identity” (Dahir, 2004, p. 345). Despite the adoption of state and national school counseling frameworks, role confusion and ambiguity continues to plague some school counseling programs. Confusion over the nature, function, and roles of counselors in schools persists in schools today (Dahir, 2009).

Historically, guidance and counseling has struggled to define and guide itself through theory to application in the educational setting. According to Gerler (1992), the role of school counseling provided ancillary services, supporting the academic goals of the school system. The lack of a framework causes individual counselors to approach their jobs in a reactive manner, thereby placing the focus of anecdotal success on individual counselors rather than using a proactive, data-driven curriculum inspired by a counseling program. “When schools fail to clearly define the counselor’s role, school administrators, parents with special interests, teachers or others believe that their agendas ought to be the school counseling program’s priority” (Dahir, 2004, p. 344).

School counseling programs have evolved exponentially with counselors assuming greater responsibilities heavily balanced on administrative and clerical duties. By assuming ancillary non-duties, school counselors have not contributed to the education of all students through advocacy and leadership. Scant data to identify the effectiveness of counseling programs and lack of counseling frameworks has created role confusion, ambiguity and ultimately counselor burnout; a “no-model model.” The no-model model of school counseling practice is reactive focused on individual student issues primarily benefitting high needs students, from both ends of the academic spectrum, preventing counselors from impacting the education of all students advocated in national, state, and local school counseling frameworks (ASCA, 2005; Education Trust, 1997; National Office of School Counselor Advocacy [NOSCA], 2010).

As school counseling continued to evolve, the Transforming School Counseling Initiative provided a model of counseling moving from a crisis response model to a preventive, proactive, collaborative program. Driven by data and addressing the personal/social, career, and academic needs of all students; this initiative made the school counseling profession a focus of educational reform (Dahir & Stone, 2012; see also Education Trust, 1997). According to the initiative, transformed school counselors use leadership, advocacy, collaboration, and data-driven decision-making strategies that are contributing to increased student success and achievement (Dahir & Stone).

### The ASCA National Model

The ASCA National Counseling Model created a shift in school counseling, moving it from a service driven model of ancillary services to an intentional program

delivery system. Accordingly, this shift requires school counselors to focus on student development and learning (Dahir, Burnham, & Stone, 2009).

The ASCA (2004) competencies were designed by practicing school counselors, counselor educators, and district school counseling supervisors for the purpose of guiding counselor educators and students to ensure graduate programs provide students with the knowledge, skills, and abilities necessary for developing comprehensive school counseling programs. The competencies also act as a tool for school counselors to use as a self-evaluation checklist and professional planning and for school administrators' use in hiring competent school counselors and evaluating the performance of school counselors (ASCA, 2004).

As school counseling programs move from service-driven counseling models toward comprehensive state and national models, many counselors report feeling powerless and stuck between crisis intervention, administrative directives, and their desire to impact student success (Chandler, Burnham, & Dahir, 2008). The use of research-based counselor training programs and continuous program assessments is important for assisting school counselors with making this programmatic change. The transformation in school counseling programs from a reactive service, "no model, model," to adoption of a comprehensive school counseling program is imperative for meeting the learning needs of all students and for the survival of school counseling programs. Research reveals that students attending schools with comprehensive counseling programs show decreased discipline issues, demonstrate increased positive behavior with peers, and earn higher grades (Dahir et al., 2009).

The ethical imperative for 21<sup>st</sup> Century school counselors is development and implementation of a counseling framework based on the national standards of the American School Counselor Association (Campbell & Dahir, 1997), the Transforming School Counseling Initiative (Education Trust, 1997), and the ASCA National Model (ASCA, 2005). The emphasis of these standards is on supporting student achievement, social justice advocacy, and school counselor accountability. These standards ask school counselors to “close the educational gap” for all learners in preparation for the demands of a diverse globalized society (Dahir, 2009).

#### Broader Bolder Approach to School Counseling

Research reveals that, with demanding students from both ends of the educational spectrum receiving the bulk of student services, students from high poverty and those living and attending schools in high minority communities continue to be inadequately served by their schools (Steen & Noguera, 2011). According to Steen and Noguera, the current government educational policies and those sponsored by private foundations are unsuccessful in creating improvement in a vast number of schools because they do not identify and address the multitude of challenges students face (Adelman & Taylor, 2002; Teale & Scott, 2010). According to Rothstein (as cited in Steen & Noguera, 2011), the high stakes testing and school improvement purported by U.S. Department of Education (USDOE, 2001) does not address the social, psychological, and environmental factors impacting our most vulnerable learners: students from high poverty and under-represented populations. Failure to address the social and economic factors impacting

student learning has doomed the high stakes testing and school improvement movement (Noguera, 2008).

To address the multifactor issues impacting the education of students, Steen and Noguera (2011) proposed a “broader, bolder approach (BBA)” (p. 1) to educational reform described by the BBA Task Force (Steen & Noguera). Central to the framework of the BBA is the role school counselors’ play in meeting the needs of students by addressing barriers hindering student learning. School counselors are urged to develop relationships by engaging students, families, and community members in partnering with schools to provide high quality P-12 programs. Throughout the BBA Program, Steen and Noguera (2011) encouraged counselors to meet students and their families where they are and understand the contexts of their lives and worlds.

Even though major educational reforms have been continuously implemented in many communities since 2000, regardless of affluence, the reforms are not working for all students (Payne, 2008). According to Noguera (2008), high dropout rates and persistent low achievement patterns can be attributed to deeper systemic problems, unable to be solved by high stakes testing and highly qualified teaching. Without addressing issues related to poverty, family distress, and other conditions affecting school achievement, there is no reason to believe closing the achievement gap for all students will occur (Steen & Noguera, 2011).

The BBA calls for school counselors to expand how they respond to student needs rather than relying on the restrictive models of intervention currently used to impact



learning. Understanding external factors impacting academic struggles, including students' social and economic contexts occurring outside school, must be considered.

School counselors are poised in leadership positions to understand and examine external barriers students face outside schools and the internal barriers students face from within the school system. According to Steen and Noguera (2011), internal barriers that occur within schools include personnel issues, poor teacher quality, low staff morale, negative school climates, and issues related to discipline. Discipline is particularly noteworthy as there is a disproportionate rate of referrals and expulsions for students of color; young males of color are particularly over-represented (Steen & Noguera, 2011). School counselors must be aware of and pay close attention to the external and internal barriers students and families face to close the achievement gap and ensure academic success (Adelman & Taylor, 2002).

There are many implications for school counselors arising from a review of the literature. The implications include the adoption of evidence-based practices, answering to the demands of local, state, and national counseling benchmarks and moving toward a framework for delivery of services to meet the needs of all learners (ASCA, 2005; Dahir & Stone, 2012; Gysbers & Henderson, 2001; USDOE, 2001). A major implication in the literature is the mandate for school counselors to become stakeholders in closing the educational achievement gap for all students in preparation for postsecondary training and a global economy (Dahir & Stone, 2012). In order to reach more effectively the needs of diverse learners and explore self-defeating behavior, school counselors need to better understand the context of students' worlds (Steen & Noguera, 2011). The focus,

process, and skills of MI may provide school counselors with the training to meet these needs.

### What is Motivational Interviewing?

Broader than behavior change, key concepts of Motivational Interviewing include: use of a “guiding style to engage with patients, clarify their strengths and aspirations, evoke their own motivation for change, and promote autonomy of decision making” (Rollnick et al., 2010). According to Miller and Rollnick (2009) the definition of Motivational Interviewing is, “MI is a collaborative, person-centered form of guiding to elicit and strengthen motivation for change” (p. 130).

MI is a respectful conversation between the counselor and client exploring the client’s feelings and difficulties with change, as well as the possibility of maximizing their human potential by engaging in healthier behaviors, habits, or attitudes that fit with their values and goals (Naar-King & Suarez, 2011). The therapeutic relationship during an MI conversation is a partnership between the counselor and the client, rather than the typical expert/recipient role common to many behavior change counseling relationships (Rollnick & Miller, 1995).

Central to MI practice is the presence of what is known as the “spirit and style of MI.” The spirit of MI, a “quiet and eliciting” counseling style (Rollnick & Miller, 1995), must be present in order for the MI process to take place. Known as a “directional” rather than a “directive” style of counseling (Miller & Moyers, 2006), MI practice is more focused than other non-directive approaches. The focus during an MI counseling session is on resolution of client ambivalence by eliciting conversation and motivation

from the client, not by imposing it. The MI counselor's task is to elicit a client's feelings, values, beliefs, concerns, and desires regarding behavior change, while listening for and facilitating client expressions of ambivalence. The client's task is to bring forth and resolve ambivalence without the counselor imposing direct persuasion, confrontation, or argument (Rollnick & Miller, 1995). Miller and Rollnick (2002) referred to ambivalence as a trait common to humans across cultures, and it is seen when individuals simultaneously want to change and don't want to change. Without intervention, individuals can be stuck in ambivalence for a long time, perhaps indefinitely.

The literature reveals that MI developed as the result of data from session recordings (Naar-King & Suarez, 2011). At this time MI is not based on a specific theory (Miller & Rose, 2009). Most commonly and mistakenly associated with Prochaska and DiClemente's (1984) Transtheoretical Model of Change (TTM), it is a common misconception that the MI process is based on the TTM (Naar-King & Suarez). According to Naar-King and Suarez, MI and TTM emerged in processes parallel to each other. The TTM is, however, credited with increasing awareness of the necessity for interventions for individuals not ready to change (Rosengren, 2009).

Although MI developed parallel to TTM, MI did not come from the TTM (Naar-King & Suarez, 2011; Prochaska, DiClemente, & Norcross, 1992). TTM stresses the process of behavior change and is appreciated by MI practitioners for recognizing and emphasizing the need for interventions with individuals ambivalent about change (Naar-King & Suarez). Many individuals, including those considered experts in MI, still mistakenly combine the stages of the TTM with the therapeutic process of MI. Although

awareness of the TTM process is recognized as important for understanding the change process, current MI practice is independent of TTM. The MI process does not rely on identification of TTM's stages of change when implementing the MI process (Naar-King & Suarez).

Not based in a theoretical school of psychotherapy, MI is not considered a treatment panacea for all problems or conditions (Miller & Rollnick, 2009). In fact, research studies show efficacy for MI as an effective pre-treatment to increase the effect of other behavior change therapies (Miller & Mount, 2001). While MI uses client-centered counseling skills (Rogers, 1959), the MI process is goal-oriented and directional, rather than simply mirroring the client. On the continuum of therapeutic styles, MI lies between the very non-directive client-centered therapy, such as Rogerian therapy, and the more directive styles of therapy, like behavior or cognitive therapy (Miller & Moyers, 2006). The goal of MI is to maximize an individual's potential by eliciting the dilemma, evoking the client's reasons or arguments for change, and encouraging the belief that realistic change is feasible and within the client's ability to accomplish (Naar-King & Suarez, 2011).

According to Naar-King and Suarez (2011), MI is not a manual-like cookbook of techniques or as a process intended to "trick" clients. With respect for the client, it emphasizes empathy, honesty, and collaboration. The client is recognized as the expert, possessing the individual resources necessary to make personal changes important for maximizing individual human potential (Naar-King & Suarez). The techniques and interventions used in MI are accompanied by the spirit of MI; without it, the counseling

process and interventions are not considered MI (Miller & Rollnick, 2009; Naar-King & Suarez).

Research indicated that becoming proficient in MI is complex (Miller & Rose, 2009; Rosengren, 2009). Simply reading a textbook or attending a two-day workshop is not sufficient training for MI proficiency (Miller & Mount, 2001; Miller, Yanhe, Moyers, Martinez, & Pirritano, 2004). Becoming proficient in MI requires continuous learning, feedback, and supervision. The best outcomes related to client change were evident when counselors participated in an initial two-day training with a Motivational Interviewing Network Trainer (MINT) and participated in subsequent 30-minute follow-up telephone feedback and coaching supervision sessions (Miller & Rose; Rosengren).

As mentioned earlier, the foundation of MI is its spirit. Naar-King and Suarez (2011) described learning the techniques of MI without the spirit is like, “learning the words to a song without the music” (p. 16). When a clinician uses MI, a strong predictor of a client’s corresponding behavior change is the global rating of the clinician’s MI spirit (Miller & Rollnick, 2002). The global spirit of MI embodies three themes; autonomy, collaborative conversation, and evocation of the client’s own motivation and commitment (Miller & Moyers, 2006; Naar-King & Suarez; Rosengren, 2009).

Supporting client autonomy is integral to the spirit of MI. Basic principles of the spirit of MI are two-fold: first, one person cannot make another change, and secondly, it is of utmost importance to respect another’s right to choose. The counselor’s job is to support clients’ autonomy in decision-making and guide them through the MI process, while eliciting their ideas for change. At the same time, the counselor is emphasizing

personal choice and responsibilities continuously (Rollnick et al., 2010). Emphasis on autonomy over decision-making is important for maintaining the spirit of MI.

Collaboration, according to Rollnick, Miller, and Butler (2008), is a guiding style where the counselor works in partnership with the client. Collaboration is a client-centered partnership that honors autonomy (Rosengren, 2009) and a guiding style for conversations regarding change (Rollnick et al., 2010). It assists clients with finding their way, allowing them to experiment and problem solve. The opposite of a collaborative approach is a prescriptive approach, often causing client resistance and failure to evoke behavior change (Miller & Mount, 2001). Collaboration in MI promotes intrinsic, autonomous decision-making leading to behavior change (Miller & Moyers, 2006).

Evoking is what focuses MI beyond client-centered counseling and moves it to a goal-oriented intervention focused counseling process (Naar-King & Suarez, 2011). Instead of imparting unsolicited advice, the MI counselor, evokes and elicits the client's personal concerns and motivations for change (Rollnick et al., 2010).

The righting reflex, critical to the effective use of MI, is the human urge to want to fix what is perceived as wrong (Rollnick et al., 2008). According to Miller & Rollnick (2002), it occurs when, "people perceive a discrepancy between how things are and how they ought to be, they tend to be motivated to reduce that discrepancy if it seems possible to do so" (p. 20). Advice-giving and problem-solving, two examples of the righting reflex, place the client in a passive role and are more likely to create resistance rather than evoking the client's thoughts, concerns, and reasons for change (Naar-King & Suarez, 2011).

It is important for counselors practicing MI to use the general principles of MI as a framework for their work (Miller & Moyers, 2006). These principles include: expression of empathy, developing discrepancy, avoiding arguing, rolling with resistance, and supporting self-efficacy (Miller & Moyers).

Critical to an MI approach is the creation of counselor empathy for the client. When clients feel understood, they are more likely to share their experiences with others (Miller & Rollnick, 2002). The expression of accurate empathy is, “skillful reflective listening that clarifies and amplifies the person’s own experiencing and meaning without imposing the counselors own material” (Miller & Rollnick, 2002, p. 7). Expression of accurate counselor empathy significantly impacts client treatment (Miller & Rollnick, 2002).

“Motivation for change occurs when people perceive a discrepancy between where they are and where they want to be” (Miller, Zweben, DiClemente, & Rychtarik, 1992, p. 8). Helping clients see in a gentle reflective way, without sacrificing the other MI principles, how current behavior does not lead to their goals can motivate clients toward change (Miller et al., 1992).

Rolling with client resistance means the counselor avoids arguing by not challenging resistance. Rolling with resistance, according to Miller and Rollnick (2002), means joining with the client rather than pushing the client.

An important motivator for clients considering a change is developing the belief that making change is possible. This belief is known as self-efficacy. Counselors help clients with motivation by supporting their self-efficacy. Supporting self-efficacy can be

done with exploration of examples of other successful changes clients have made and by eliciting client talk about change. When clients begin to hear themselves talking about change, commitment language builds (Miller & Mount, 2001; Miller et al., 1992).

### Fundamental Processes in Motivational Interviewing

MI consists of four fundamental processes: engaging, focusing, evoking, and planning. Engaging encompasses the process of building the relational foundation for MI between the client and the counselor. Focusing, or agenda setting, is conducted by inviting clients to select an issue or behavior they are ready and able to tackle rather than the counselor imposing a priority (Rollnick et al., 2010).

Evoking change talk involves the counselor, through strategic use of complex reflections and open ended questions, eliciting information about a behavior change the client is considering. Counselors further accomplish this strategy by engaging a client in a dialogue with the client regarding how he/she sees change potentially taking place, what makes sense, and exploring with clients deciding if, how, and when the change will take place (Rollnick et al., 2010). An important competency for MI counselors is the ability to recognize change talk, elicit change talk, and respond effectively to the client's change talk (Miller & Moyers, 2006).

Planning is a collaborative process that takes place between the counselor and the client. It is a discussion regarding if, how and when the change will take place (Miller & Moyers, 2006). A challenge for counselors at this stage is pacing with the client to avoid causing resistance.



## 8 Stages of MI Training

There are 8 stages of MI training (Miller & Moyers, 2006). They are as follows:

**Stage 1: The Spirit of Motivational Interviewing.** Much like the therapeutic alliance, the spirit of MI is the foundation its effective, accurate practice (Miller & Rollnick, 2002; Rollnick & Miller, 1995). According to Miller and Rollnick (2002; Rollnick & Miller, 1995), the underlying spirit of MI is a respectful way of being with the client that includes collaboration, evocation, and value for client autonomy. Sharing principles from client centered counseling (Rogers, 1980) and positive psychology (Snyder & Lopez, as cited in Rosengren, 2009), motivational interviewing assumes that people possess personal expertise and wisdom, including the potential to develop in positive ways if provided appropriate conditions of support (Miller & Moyers, 2006).

According to Miller and Moyers (2006), a counselor's ability to convey the spirit of MI is a predictor of the counselor's potential use of other MI consistent behaviors and a predictor of client responsiveness during the MI counseling process (Miller & Moyers, 2006). Willingness to practice the spirit of MI is a predictor of acquiring expertise when learning MI (Miller & Moyers, 2006).

**Stage 2: OARS-Client Centered Counseling Skills.** Especially important to the development of MI skills is the understanding and practice of accurate empathy. The complex skill of accurate empathy encompasses accurate reflection of client verbalizations including ideas not yet verbalized (Truax & Carkhuff, as cited in Miller & Moyers, 2006). The experience of accurate counselor empathy can provide clients with

efficacy for change, highlight a discrepancy, or enhance the client's feeling for the need for change (Miller & Moyers, 2006).

In addition to reflections, the foundations of MI skills are the three micro-skills known by the mnemonic acronym OARS: (O), asking open-ended questions, (A) affirming, (R) reflecting, and (S) summarizing (Miller & Rollnick, 2002).

**Stage 3: Recognizing and Reinforcing Change Talk.** MI is described as a directional form of client-centered counseling, because it is both strategic and goal-directed. Key to MI is the counselor's role of evoking the client's internal reasons for change by helping clients look at and resolve ambivalence. When MI is effective, the client begins to argue for change, rather than against it.

As clients argue for change and begin to verbalize "change talk" (desire, ability, reasons, need), commitment to change emerges (Amrhein, Miller, Yahne, Palmer, & Fulcher, 2003). According to Miller and Moyers (2006), MI is a counseling approach that intentionally increases change talk and intentionally reduces resistance (Moyers, Miller, Hendrickson, 2005). The counselor responds to clients' verbalizations of change by reinforcing change talk and minimizing statements of status quo, monitoring the client's cues for resistance, consciously acting to minimize client resistance throughout. Throughout the session, the counselor monitors the client's cues for resistance and consciously acts to minimize client resistance. Interestingly, if client resistance is low during an MI session, the likelihood of subsequent behavior change is increased (Miller et al., 2004).

Important to the concept of change talk is the Amrhein et al. (2003) study that found the strength of client commitment language was found to be predictive of abstinence from illicit drugs (Miller & Moyers, 2006; Rosengren, 2009). Amrhein et al. (2003) indicated that commitment language emerged with the use of the other forms of change talk; desire, ability, reasons, and need. The emergence of commitment language is thought to be a precursor to behavior change (Amrhein et al., 2003; Miller & Moyers, 2006). Behavior change occurs when change talk (e.g., desire, ability, reasons, need, etc.) is followed by expressions of commitment (Miller & Moyers, 2006).

According to Miller and Rollnick (2002), the MI process occurs in two phases. During Phase 1, the counselor evokes client motivations for change focusing on desire to change, need for change, ability and/or reasons to change. In Phase 2, the counselor focuses the MI process on strengthening and consolidating commitment to change.

As part of MI training, it is paramount for the counselor to understand and be able to accurately identify change talk. If a counselor cannot recognize change talk, it will be difficult to intentionally differentiate it and shape it toward language of commitment.

**Stage 4: Eliciting and Strengthening Change Talk.** Developmentally, counselors learning MI skills wait for change talk to occur by first learning to recognize and then reinforce it. However, the strategic skill that differentiates MI from other therapeutic approaches is mastering the skill of eliciting change talk (Miller & Moyers, 2006).

While no mechanism exists for reliable coding of counselor responses that evoke change talk, the pattern and strength of client change talk can be reliably coded. When a

counselor learns to recognize change and commitment talk, their behavior is shaped by the client's change and commitment talk. Change and commitment language become a source of immediate reinforcing feedback for the counselor. The counselor feels like, "I'm doing it right" (Miller & Moyers, 2006, p. 9).

**Stage 5: Rolling With Resistance.** When counselors encounter inevitable resistance, it is important to "roll with" the resistance, instead of disputing or arguing with the client. Opposing the client's resistance can strengthen the client's argument against change (Miller & Moyers, 2006).

Miller and Rollnick (2002) described a number of ways a counselor can roll with resistance, including utilizing simple and complex reflections following the client's resistant statement. Other strategies for working with resistance include recognizing the client's control or personal choice, reframing, and "cozying-up" to resistance (Miller & Moyers, 2006). Counselors proficient in MI use resistance as a natural part of the MI process.

**Stage 6: Developing a Change Plan.** As client increases talk of desire, ability, reasons, and need for change (DARN), it is likely that commitment language will occur (Amrhein et al., 2003). After hearing commitment language, the counselor's skill at recognizing, summarizing change talk, and timing correctly with an open question like, "What is next?" can move the client from Phase 1 (resolving ambivalence, expression of motivations for change focused on desire to change, need for change, ability and/or reasons to change) to Phase 2 (strengthening and consolidating commitment to change). At this point in the process, if the client expresses resistance, the experienced MI

counselor returns to Phase 1 strategies to strengthen motivation for change and decrease resistance again.

Like dancing, the counselor takes cues from the client (the partner) and adjusts throughout the process. As the dance continues, a critical skill for the counselor at the juncture of Phase 1 and Phase 2 is to gauge the client's responses and willingness to discuss how the change will occur. It is counterproductive to a client's momentum if the counselor is not in-step with the client. For the MI process to remain true, the counselor must remain client-focused, continuously adjusting to the client's pace (Miller & Moyers, 2006).

**Stage 7: Consolidating Client Commitment.** Pressing too soon for change can undermine the commitment process (Miller & Moyers, 2006). However, according to Amrhein et al. (2003), behavior change is unlikely unless clients verbalize a commitment to change. The skill necessary for counselor mastery at Stage 7 is evoking commitment language from the client. Evoking words like, "I will" and "I do" is language related to specific client commitment and plan (Miller & Moyers).

**Stage 8: Switching Between MI and Other Counseling Methods.** MI was never meant to be the only tool for counselors to use in practice. It was initially intended to help clients move from the ambivalence of pre-contemplation and contemplation through preparation to action (Miller & Moyers, 2006).

MI is often used with other evidence-based counseling methods. In fact, research reveals a synergistic effect when using MI as a precursor to and in combination with other behavior change treatment methods (Hettema, Steele, & Miller, 2005). Once

ambivalence is resolved and the client builds motivation and a change plan, the counselor may switch to another treatment method for supporting the client while maintaining MI's collaborative, empathetic, and respectful counseling style. MI is used widely in the delivery of other approaches, including cognitive-behavior therapy and twelve-step facilitation methods (Miller & Moyers, 2006). With these approaches, when resistance and motivational obstacles arise, counselors must be poised to switch back to an MI style to keep the counseling process moving forward (Rosengren, 2009).

### Training in Motivational Interviewing

Although becoming a skilled MI practitioner has been described as a complex task, research suggests the best way to learn basic MI skills is for individuals to take a two-day training course, followed by ongoing feedback and coaching supervision sessions (Miller & Mount, 2001; Moyers & Martin, 2006). Skill maintenance and increased MI proficiency seems greatest when training is followed by coaching plus feedback supervision sessions (Miller et al., 2004). According to Tobler et al. (2005), the supervision component is critical for reaching MI competency.

Acquisition and implementation of MI skills can be effective for counselors in a variety of settings (Rosengren, 2009). Learning MI seems to work well for professionals across cultures, as well. African American, Native American, and Spanish-speaking addiction providers trained in MI showed as large or larger gains in learning MI than was found with Caucasian, non-Hispanic providers (Miller et al., 2008).

Not everyone seems equally positioned for learning and maintaining MI skills. Individual orientation may dispose some individuals better for learning MI than others.

MI trainees who work from a client deficit model seem to struggle with learning MI, due to the belief that clients can benefit most by learning from their teaching. Counselors who believe that clients lack insight or that clients come from positions of denial, may have a more difficult time learning MI (Rosengren, 2009). In addition, Hartzler, Baer, Dunn, Rosengren, and Wells (2007) found that clinicians trained in MI who endorse a disease model, revert back to prior behaviors after three months. This relapse was attributed to the existence of a theoretical dissonance between the core tenants of MI and pre-existing beliefs.

Hartzler et al. (2007) recommended counselors and practitioners focus their MI learning efforts in the follow sequence to become proficient in the MI process.

1. Introductory activities to MI include watching MI training videos and reading written materials as preparation for a two day MI training workshop.
2. Completion of a two-day MI training with skills practice.
3. Subsequent to the two-day MI training participants are likely to have beginning MI proficiency (Miller et al., 2008; Hartzler et al.). For greater skill acquisition and to maintain proficiency, coaching plus feedback supervision over time has shown to maintain and increase MI skills. This feedback and coaching can be achieved in a variety of settings, including distance learning, telephone supervision, taped observation, or real-time observation (Rosengren, 2009).

### Motivational Interviewing Proficiency and Client Outcome

Research indicates it is important for counselors desiring to impact client behavior outcome with MI to strive for and maintain MI proficiency. Thrasher et al. (2005) found

the quality of MI sessions predicted greater client adherence in antiretroviral therapy.

Client change talk seemed to increase with the quality of MI conversations and increased change talk is predictive of client behavior change.

Moyers and Martin (2006) found that MI adherent behavior is correlated with the increase in client change talk. Likewise, Moyers and Martin found MI inconsistent behavior increases the likelihood of client resistance or sustains talk.

### The Motivational Interviewing Treatment Integrity Scale (MITI; 3.1)

The MITI scale was developed from the Motivational Interviewing Skills Code (MISC 1.0; Miller & Mount, 2001) with the intention of creating a cost and time effective method of coding MI counselor functioning. It also is intended for the purpose of training and supervision. The initial MITI scale and scoring manual was developed from an exploratory factor analysis to determine the dimensions measured by the Motivational Interviewing Skill Code (MISC; 1.0) Scale (Moyers, Martin, Manuel, Hendrickson, & Miller, 2005). Inter-rater reliability for the MITI was assessed using three trained MITI coders. The ability of the MITI (all versions) to determine changes in counselor behavior was assessed with comparison of pre and post training tapes of counselor behavior.

The MITI (3.1) evolved with the identification of two global MI ratings. They are the spirit of MI and counselor empathy. Counselor behavioral counts are a part of the MITI (3.1) score, which includes the following behavior categories: general information, MI adherent, MI-non adherent, closed questions, open questions, simple reflections, complex reflections, and total reflection (Moyers, Martin, Manuel, Miller, & Ernst, 2010).



Reliability for the MITI (3.1) was derived using independent coders revealing intra-class coefficients ranging from .5 to .9, in the good to excellent range. Scoring before and after MI workshop behavior, MITI (3.1) scores indicated sensitivity for detecting improvement after training and across the learning curve (Moyers et al., 2010).

Coding training for the MITI (3.1) consists of trainees passing through a series of learning tasks focused on learning to code behaviors related to MI competence and the global dimensions of the MITI (Moyers et al.). Reliable coding for the MITI (3.1) requires one 10-minute pass of an audiotape in contrast to the three passes required of the MISC (Moyers et al., 2010).

While the MITI in all its versions was not intended to replace the MISC, its application is a simplified, cost effective method for documenting clinician MI fidelity (Moyers et al., 2010). The MITI provides quick, economical feedback relevant to MI's clinical attributes like empathy and the spirit as well as information important for MI micro skills development. According to Moyers et al., the MITI is good for measuring entry and foundational MI skills and, therefore, an appropriate tool for measuring MI fidelity in this study.

**MITI Scores.** The MITI gold standard scores for participants on the Global Clinician Ratings range from average 3.5 for a beginning clinician to an average of 4.0 for a competent clinician (Moyers et al., 2010). The Global Rating equation is, "Global Spirit Rating = (Evocation + Collaboration + Autonomy/Support)." A complete Global Rating Score would be the mean of two or more scores submitted by the coders. The standard scores for percent of MI Adherent (%MiA) ranges from 90% for beginning

proficiency to 100% for competent proficiency. The Percent of MI Adherent score is calculated using number of MI Adherent (MiA) and number of MI Non-Adherent (MiNa), “Percent MI Adherent (%MiA) =  $MiA / (MiA + MiNa)$ ” (Moyers et al.).

### Using Motivational Interviewing with Adolescents

The MI literature reveals promising results in research with adolescents. In a case study, Atkinson and Woods (2003) used MI as an intervention strategy with an at-risk high school age student. Behavior included irregular attendance, lack of homework completion, and general apathy toward school. After five, one-hour, voluntary weekly meetings, the student showed improvement on pre- and post-intervention assessments. Nine months post MI intervention, the student was still attending school regularly.

Stern, Merideth, Gholson, Gore, and D’Amico (2007) examined the possibility of using a brief MI intervention in a pilot study with high risk adolescents in a primary care setting. Feedback from the MI pilot suggested the adolescents were willing to talk about their alcohol and drug use and expressed a willingness to change. According to the authors, the findings suggested brief MI is a viable approach in work with high-risk youth in a primary care setting.

Van Voorhes et al. (2009), in a study to engage Internet-based behavior change interventions with adolescents, compared two forms of physician engagement, brief advice, and MI. The purpose of the research was to enhance and measure participation outcomes in an Internet depression intervention with 83 adolescents identified as at risk for developing major depression. The results indicated that MI increased use of Internet-based depression interventions during a one- to two-month period.

### Motivational Interviewing in the School Setting

Motivation in the school setting looks different depending on the situation. Most students experience both internal and external motivation throughout their school day. According to McNamara (2009), motivation is, “not a unitary construct but a term used to summarize the net effect of all internal and external factors that influence behavior” (p. 7).

Crude examples of external motivators abound at the elementary school level and include stars, stickers, points, and rewards. As students mature, they seem less impressed with external motivational systems and, hopefully, continue to develop self-motivation (McNamara, 2009).

Students who are not engaged in the learning environment are often labeled in school as passive, disengaged, alienated, unmotivated, or reluctant learners. The context of their behavior or attitude is rarely explored effectively; students tell the authority what is perceived to get the “off the hook.” Often, student attitudes toward learning are expressed with disruptive or destructive behavior, interfering with the teaching and learning environment (McNamara, 2009).

McNamara (2009) contended that students are labeled because of their lack of commitment to the goals teachers and school systems set. These labels for students communicate negative messages and describe students with pessimistic attitudes toward students’ academic and social achievement. School staff begins to think of and describe students in terms like unmotivated and disengaged. As the cycle persists, a student’s

dilemma increases and his or her negative labels become perceived as permanent and unchanging (McNamara).

Ideally, students learn to be in control of their own behavior, although, according to McNamara (2009), a continuum of control exists where students are both externally and internally regulating themselves. For students who lack control of their behavior, student management systems have been created. The goal of most student management systems popular today is to bring disruptive, unmotivated student behavior back into teacher and school control rather than back into self-control. For student management systems to be effective, students must develop commitment to changing their behavior. Lack of commitment to change can become an obstacle for student opportunities.

Students displaying disruptive behavior may not want to be in school and may not share the educational aspirations of their school staff. MI seems like an appropriate intervention for addressing self-defeating student behavior and the student's commitment to changing his or her behavior (McNamara, 2009).

According to Eakin & Biles (2012), students are often sent to the counseling office involuntarily, setting up a resistance for the student. Using an MI approach and "by joining effectively with the student, counselors can break down the resistance and help initiate the change process" (Biles & Eakin, as cited in Dahir & Stone, 2012, p. 49). MI is an appropriate intervention for addressing self-defeating student behavior and students' commitment to changing their behavior (McNamara, 2009).

MI seems to be an effective process for eliciting commitment to the behavior change necessary for increasing student engagement and motivation (Atkinson & Woods,

2005; Eakin & Biles, 2012; McNamara, 2009). While it seems useful for school counselors to learn and implement MI for student interventions, another area of potential for implementing MI is with staff, teachers, and administrators. A school staff with knowledge of the spirit of MI may increase the effectiveness of collaborative interactions between individuals.

Training school counselors in MI and implementing the process through counseling departments could impact a school culture. Incorporating MI in schools could transform school climates by embracing the spirit of MI, creating collaborative, safe, learning environments.

### Summary

Given the mandates of school reform to close the achievement gap and prepare all students for postsecondary training and survival in a global economy, evidence-based school counseling practices must be embraced (ASCA, 2005; Dahir & Stone, 2012; USDOE, 2001). The literature reflects the need for schools to address student engagement and dropout rates, especially for students from underrepresented populations (Dahir & Stone).

In response to the demands of 21<sup>st</sup> Century educational legislation, school counseling is moving from a reactive model, serving the needs of the most demanding students, to a pro-active, programmatic framework to meet the diverse needs of all learners (ASCA, 2005). Core to this shift is the incorporation of data-based decision-making and the adoption of evidence-based counseling practices. Counselor education

programs and practicing school counselors are embracing these pedagogies (ASCA, 2005).

School counselors are poised well to work with students and understand the contexts of their worlds, address self-defeating behaviors, and assist students with behavior change and goal setting (Dahir & Stone, 2012; Steen & Noguera, 2011). However, raising the bar with legislation and rhetoric are not enough to confront student disengagement and decrease student dropout rates. Current literature suggests that many school counselors are not well prepared with effective interventions to work with disengaged students and students from diverse backgrounds (Gysbers, 2004).

Motivational Interviewing is a counseling process that has been effectively implemented across cultures and throughout the world (Miller & Rose, 2009; Miller et al. 2004). It has been widely researched in the fields of medicine and health care, with promising results in adult and adolescent populations (Naar-King & Suarez, 2011). However, a review of the literature reveals little research on MI training for school counselors, the implementation of MI in school settings, or the efficacy of using MI with students. As an intervention in educational settings, the MI process has potential to explore the interests of students' life choices and decision-making, while addressing the concerns of the educational system.

Before studying the efficacy of MI as a school wide counseling intervention, it is important to focus on effective training. The research reveals that school counselors and educators are learning basic MI skills at workshops and conferences and counselors are implementing MI in school counseling programs (Biles & Eakin, 2011). However, at the

time of this article, the literature reveals little research on MI training, skill acquisition, and skill maintenance in school counseling.

Current MI research suggests that a two-day training or workshop is not sufficient to increase and maintain proficient MI skills (Miller et al., 2004). In fact, counselors who do not receive follow up supervision return to their previous MI training skill level within a short time. Subsequent feedback and coaching supervision were found to impact the development of proficient MI skills (Miller et al., 2004; Rosengren, 2009). According to research, a counselor's MI proficiency level is the primary predictor of client adherence (Moyers et al., 2010; Thrasher et al., 2005).

The MI process, spirit, skills, and focus on autonomy and behavior change reveals a promising intervention for increasing school counselor-student relationships and assisting students with behavior change related to self-defeating behavior. Research on training school counselors is recommended as a beginning for development of MI as an evidence-based school counseling intervention.

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CHAPTER 3

The Impact of Feedback and Coaching Supervision on School Counseling Graduate  
**Students' Motivational Interviewing Global Rating Scores and Percent of**  
Motivational Interviewing Adherent Behavior

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### Abstract

This manuscript reports the results of subsequent Motivational Interviewing (MI) feedback and coaching supervision on school counseling graduate students' Motivational Interviewing skills. This study investigated school counseling graduate students ( $N=3$ ), with previous training in beginning MI. Subsequent to the beginning training, the research participants submitted 10 counseling tapes for coding using the Motivational Interviewing Treatment Integrity (MITI; 3.1) rating scale (Moyers, Martin, Manuel, & Miller, 2010). A concurrent multiple baseline design was used. The school counseling graduate students received feedback and coaching supervision on their coded MITI (3.1) scores after they met the requirements of their randomly assigned baseline. The mean MITI global rating scores and the percent of MI adherent behavior were the two MITI scores used in this study for data collection. After the MI feedback and coaching supervision intervention was initiated, participants increased their mean MITI global rating scores. The MITI percent of MI adherent scores did not show an increase from baseline to intervention, percentage scores fell within the proficient range during both the baseline and intervention phases. These scores began high and, in general, remained high throughout the course of the research. Results from this study may inform future research on coaching and feedback supervision of school counselors.

## Introduction

Motivational Interviewing (MI) emerged for William Miller during his 1983 sabbatical leave in Bergen, Norway, as a result of interaction with a group of psychologists (Miller & Rose, 2009). With the psychologists' feedback, Miller became aware of his therapeutic process. He realized that he empathetically focused on client speech and intentionally explored client ambivalence (Miller & Rose, 2009).

MI has been implemented and researched in a variety of settings with promising results (Miller & Rose, 2009; Rosengren, 2009) for adult and adolescent populations (Naar-King & Suarez, 2011). The literature revealed that MI has been studied throughout the world, including in health care settings and medical school curriculums, and it included promising results for behavior change in juvenile justice settings and prison systems (Naar-King & Suarez, 2011; Miller & Rose, 2009; Rollnick, Heather, & Bell, 1992; van Voorhes et al., 2009).

According to a review of the literature, MI has been introduced to school settings in the United States and Great Britain (Atkinson & Woods, 2003; Biles & Eakin, 2011; McNamara, 2009). At the time of this study, school counselors are being trained in MI at workshops, in school district trainings and at state and national conferences (Biles & Eakin).

Despite the popularity of MI training, the literature revealed little about best practices for training school counselors in MI and included scant information about implementing MI in school settings. Instead, the literature revealed a wealth of research

on training a variety of professions other than school counselors (Miller & Rose, 2009; Rosengren, 2009; Motivational Interviewing Network of Trainers [MINT], 2012).

The objective of this study was to investigate the impact of feedback and coaching supervision on school counseling graduate students with previous training in a beginning, two-day MI workshop. To the authors' knowledge, there is not an empirical study on the impact of subsequent feedback and coaching supervision related to implementation of MI in school counseling setting.

Motivational Interviewing is a conversation about individuals' difficulties with change. It is considered a therapeutic process intended to explore and recognize possibilities for engaging in different behavior based on the client's values and goals (Naar-King & Suarez, 2011; Rosengren, 2009). Empirical evidence suggests that Motivational Interviewing has been used efficaciously with a broad range of adult behavioral-change problems (Miller & Rollnick, 2002; Rosengren, 2009). In recent years, MI has been researched in a variety of adolescent settings in the medical field with beneficial results. These adolescent settings included obesity prevention, substance abuse, smoking cessation, and HIV prevention (Berg-Smith et al., 1999; Naar-King, Lam, Wang, et al., 2008).

According to Rollnick, Butler, Kinnorsley, Gregory, and Mash (2010), the premise of MI is that targeted behavior change emerges from a process of incremented, specific, varied tasks, working from a framework for understanding a client's process of behavior changes. These changes can involve the initiation, modification, or cessation of



a particular behavior, choice, attitude, resolution, or acceptance (Miller & Rollnick, 2002; Miller & Rose, 2009).

The counselor's goal is to evoke the client's reasons or arguments for change and encourage belief that realistic change is feasible. It is accomplished through exploration of the ambivalence that prevents change (Naar-King & Suarez, 2011; Rollnick et al., 2010). The foundation of MI is its spirit. Miller suggested that learning MI techniques without the spirit is like "learning the words to a song without the music" (Naar-King & Suarez, 2011, p. 16). Known as the "spirit of MI," the counselor is responsible for maintaining a productive therapeutic relationship (Miller & Moyers, 2006).

In MI, a strong predictor of a client's behavior change is the global rating of a clinician's MI spirit (Miller & Mount, 2001; Moyers et al., 2005). The spirit of MI embodies three themes; autonomy, collaborative conversation, and evocation of the client's own motivation and commitment (Hartzler, Baer, Dunn, Rosengren, & Wells, 2007; Moyers et al., 2007; Rosengren, 2009).

### Rationale for Using MI in School Counseling

According to current counseling literature, understanding the context of a student's world is a critical component for meeting the national, state, and local demands of school counseling programs (ASCA, 2005; Dahir & Stone, 2012; Steen & Noguera, 2011). An essential critical component of preparing all students for post-secondary education is closing the educational achievement gap (ASCA, 2005; NOSCA, 2011). Understanding and implementing evidence-based interventions for addressing

engagement, motivation, and behavior change are critical to the primary mission of today's school counseling programs (ASCA, 2005; Steen & Noguera, 2011).

“Eliciting student engagement, however, often seems to be missing from school reform initiatives. Students often experience school reform as not relevant to their lives and something done to them rather than with them or for them” (Eakin & Biles, 2012, p. 35). Proponents of implementing MI in school settings believe MI may be an effective process for eliciting commitment to behavior change and shows potential for increasing student engagement and motivation (Atkinson & Woods, 2003; Biles & Eakin, 2011; McNamara, 2009). In addition to its potential as an intervention for students, MI is thought to have potential for transforming school pedagogy and changing school culture (Atkinson & Woods, 2003; McNamara, 2009; Miller, Hendrickson, Venner, et al., 2008).

As school counselors implement MI in school settings, it is imperative that its efficacy as an evidence-based practice be studied. Before pursuing research related to the implementation of MI in school settings, it is important to know how to properly train school counselors in MI. Research on the impact of MI in school settings will not be useful unless it is ensured that school counselors possess the MI skills necessary to implement MI effectively in school counseling programs.

### Review of the Literature

Developed in 1983, as a brief intervention for problem drinking, effective applications of MI have since expanded to include training and research in a variety of health related fields, including training of medical students and prison guards (Miller & Rose, 2009; Trasher, Golin, Earp, Tien, Porter, & Howie, 2005). MI applications in

health care settings include diabetes and weight management, smoking cessation, medication management, and treatment and prevention of HIV infection (Miller & Rose, 2009; Rosengen; 2009). Published studies of MI have been applied to a broad range of adult behavioral-change problems (Miller & Mount, 2001; Miller & Rose, 2009). In addition, MI has also been used with adolescent populations and researched in a variety of settings with beneficial results. These settings include obesity prevention, substance abuse, and HIV prevention (Berg-Smith et al., 1999; Naar-King et al., 2008). While some educators and school counselors are currently using motivational approaches, little research on training, supervision, and implementation of MI in the K-12 setting can be found in a review of the literature. It is, therefore, unknown if the motivational approaches currently being used are meeting the standards of evidence-based practice of MI.

### Motivational Interviewing and School Counseling Programs

According to McNamara (2009), school counselors often lack specific supervised training in counseling approaches addressing self-defeating behaviors of disengaged students. Training, implementation, and supervision of MI in educational settings shows promise for increasing the ability of school counselors and staff to develop collaborative relationships with any student struggling with ambivalence or poorly engaged students who exhibit resistance, defiance, and hostility. In addition, MI has potential as a leadership tool for use with school staff charged with closing educational gaps for all learners (McNamara, 2009).

Therapeutic interventions to enhance the quality of life in the school setting are a challenge for school counselors (Atkinson & Woods, 2003; McNamara, 2009). MI as a therapeutic intervention has potential to assist students to define and address their needs and life choices. Ethically, using an MI approach in school counseling recognizes and supports students in a collaborative relationship, partnering with students as they navigate the decision making process (Atkinson & Woods, 2003).

According to McNamara (2009), lack of knowledge and commitment to the goals of the educational system earns negative labels for students. According to McNamara, pessimistic attitudes toward a student's potential shapes systemic perceptions of the student's potential for inclusion, academic and social success. A lack of motivation persists when students develop attitudes that lack self-efficacy (a belief that change is possible and that one is capable of making that change); low self-efficacy results in ongoing feelings of hopelessness and disengagement (Naar-King & Suarez, 2011; Noguera, 2008). When the cycle persists, the dilemma increases and leads to disengagement and failure.

Research implies that student achievement is impacted by social, psychological, and environmental factors (Adelman & Taylor, 2002; Teale & Scott, 2010). According to Noguera (2008), the relationships between students' racial and cultural identities and their beliefs about education can profoundly impact academic performance. According to Rothstein (2008), African American and Hispanic students more commonly experience persistent and concentrated poverty. House and Martin (1998) advocated that low

income youth and youth from affluent homes must have the equal access to educational opportunities.

By using an MI approach, school counselors may have an opportunity to respectfully and collaboratively explore such self-defeating beliefs with the spirit of MI. This process allows a student to normalize beliefs, explore ambivalence, feel supported, develop self-efficacy, and gain the ability to engage and ultimately achieve (McNamara, 2009).

School counselors are mandated by federal, state, and local entities to close the graduation and achievement gaps existing in our schools while promoting post-secondary attainment throughout the K-12 system (ASCA, 2005; USDOE, 2001). It is important for school counseling programs to increase implementation of evidence-based practices by adopting school counseling frameworks focused on increasing engagement. To meet these imperatives, school counselors must acquire the skills necessary for meeting the needs of students from at-risk populations. MI is an evidence-based practice showing promise for enhancing much needed behavior change demanded by current educational policies. It has potential for assisting school counselors with meeting demands of the school counseling programs outlined in the American School Counseling National Model (ASCA, 2005) and the ASCA School Counselor and Student Competencies (ASCA, 2004).

The following information would be useful to school counselors considering implementing MI in school counseling programs:

- a. Include clinical findings suggesting MI's synergistic effect when used as a pre-treatment with therapies like Cognitive Behavioral Therapy, Brief Solution Focused approaches, and 12-Step programs (Bien, Miller, & Boroughs, 1993; Miller & Rose, 2009).
- b. Utilize areas of research related to broader applications of MI and the increased effect of interventions combined with MI, including behavior change, health care, and psychological services (Arkowitz, Westra, Miller, & Rollnick, 2008; Miller & Rollnick, 2002; Rollnick et al., 2010; Rollnick, Miller, & Butler, 2008).
- c. Apply MI applications in school settings as a pre-intervention strategy to increase personal interest or motivation for change before other academic, personal, social, and/or behavior interventions are made.

### Motivational Interviewing Training

Becoming a skilled Motivational Interviewing practitioner is described as a complex and ongoing task (Miller & Rollnick, 2009). The implication is that the best way to learn basic MI skills is for individuals to take a two-day Motivational Interviewing Network of Trainers (MINT) beginning training with skills practice, followed by ongoing feedback and coaching supervision sessions (Hartzler et al., 2007; Miller & Mount, 2001; Miller & Rose, 2009). Skill maintenance and increased MI proficiency seems greatest when training is followed by feedback plus coaching supervision sessions (Miller, Yanhe, Moyers, Martinez, & Pirritano, 2004). According to Miller and Rose (2009), the coaching and feedback supervision component is critical for reaching MI competency.

The importance of subsequent MI feedback and coaching supervision after a two-day beginning MI training is highlighted in early MI studies. Accordingly, practitioners reported high self-satisfaction and perceived increased MI proficiency gains after an MI workshop (Miller & Mount, 2001). Review of tape samples pre- and post-workshop data revealed modest gains in MI clinical skills and no change in client change-talk.

Acquisition of MI skills can be learned by a variety of practitioners, in addition to substance abuse counselors, where MI first emerged. Baer et al. (2004) found MI skill gains in training of community therapists after a two-day workshop, which included skills practice. In the medical field, two-day workshops with skills practice showed similar gains in MI skill acquisition for dietitians (Berg-Smith et al., 1999), nurses (Lane, Johnson, Rollnick, Edwards, & Lyons, 2003), medical students (Martino, Haesler, Belitsky, Patalon, & Frotin, 2007), and general practitioners (Rubak, Sandlbaek, Lauritzen, Borch-Johnson, & Christensen, 2006).

Learning MI seems to work well for professionals across cultures. African American, Native American, and Spanish-speaking addiction providers trained in MI showed as large or larger gains in learning MI than was found with Caucasian, non-Hispanic providers (Miller et al., 2008). MI has been studied and implemented worldwide, across continents, cultures, and languages (Miller et al., 2008).

### Hypothesis

The hypotheses are as follows:

*H<sub>0</sub> School counseling graduate students receiving Motivational Interviewing feedback and coaching supervision subsequent to a beginning MI training will not*

*improve MI global rating scores and percent of MI adherent behavior on the Motivational Interviewing Treatment Integrity (MITI; 3.1).*

*H<sub>1</sub> School counseling graduate students receiving Motivational Interviewing feedback and coaching supervision subsequent to a beginning MI training will improve MI global ratings scores and percent of MI adherent behavior percent on the Motivational Interviewing Treatment Integrity (MITI; 3.1).*

If MI is to be implemented as evidence-based practice in school counseling, it seems logical that a study of training school counselors according to the research findings is important. According to the MI literature, feedback and coaching supervision is one method of improving MI skills subsequent to training (Miller et al., 2004; Rosengren, 2009). The purpose of this research was to examine training school counseling graduate students with beginning MI training and the impact an intervention of subsequent MI feedback and coaching supervision had on MI skill improvement.

## Materials and Methodology

### Research Design

This study used a concurrent multiple baseline A-B design, comparing baseline scores on the MITI (3.1) to the MITI (3.1) scores after the participants received the intervention. The intervention consisted of 30-minute sessions of feedback and coaching supervision, based on coded MI counseling videotapes submitted by the research participants. MITI (3.1) was used for coding in this study (Moyers, et al. 2010).

A concurrent multiple baseline A-B design across participants ( $N=3$ ) was used for this study. The study intended to compare the dependent variable, the participant's



baseline scores on the MITI (3.1), to the independent variable, the MITI (3.1) scores after the feedback and coaching intervention was implemented. In a concurrent multiple baseline design across participants, each participant begins the baseline at the same time and there is a set lag time before the intervention phase of the study is implemented for each participant.

In multiple baseline designs, the lag time, between implementation of each A-B phase, allows for experimental control. The concurrent A-B multiple baseline design, rather than an A-B-A design, was chosen for this study, because it was not possible to withdraw the treatment or learning after the intervention took place.

Multiple baseline designs are well suited to a small study, because they “lend themselves to program efficacy measures, have no withdrawal of intervention requirements, and are easy to conceptualize and implement” (Gast, 2010, p. 278). Threats to internal validity in a multiple baseline design (e.g., history, maturation, and testing) are addressed by staggering the introduction of the independent variable. In this study, the intervention or independent variable was the implementation of the coaching and feedback supervision sessions.

Experimental control in multiple baseline designs across participants requires the collection of acceptable pre-intervention data before the intervention is introduced. To establish confidence in the independent variable, an immediate change should be noted when the independent variable is introduced and observed for each of the study’s participants (Gast, 2010; Riley, Tillman, & Burns, 2009).

According to Gast (2010), acceptable pre-intervention baseline data should be determined prior to the start of the study. One of the criteria recommended by Gast was to implement the intervention after a set time, consisting of a set number of days or sessions. Implementing the intervention after a set time was chosen based on the timing of the study (the school year was coming to a close). The coaching and feedback supervision intervention intervals were scheduled to begin after each participant submitted their assigned number of baseline tapes.

### Participants

The participants ( $N=3$ ) were school counseling graduate students from a counselor education program in the Pacific Northwest. One participant was a doctoral student working as a school counselor with eight years of school counseling experience. The other two participants were masters' degree level graduate students in school counseling. One of the participants had earned a master's degree and was enrolled in an internship to fulfill requirements to obtain state licensure. The other participant was enrolled in a school practicum experience to fulfill requirements for a master's degree in counseling. The participants were volunteers, selected after responding to an e-mail informing school counseling students from the University of the need for research participants in the study. A requirement of participation in the research was previous training in a two-day beginning Motivational Interviewing workshop provided by a certified trainer from the Motivational Interviewing Network of Trainers (MINT). After meeting the criteria for the study, the participants were asked if they were interested in participating in the research study. Before signing an Institutional Review Board

approved consent form, the researchers explained the study to the participants and the participants agreed that they understood what participation in the research entailed.

Participants were aware that they could withdraw from the research at any time.

Permission from each participant's school district was also obtained in writing.

### Measures

#### The Motivational Interviewing Treatment Integrity Scale (3.1)

The two MITI (3.1) scores used in this study were the mean Global Rating (GR) score and the mean Percent of MI Adherence (MiA) scores. Means were derived from the MITI scores submitted by each of the coders. Two coders were used to increase inter-rater reliability. The MITI GR score is a combination of the participant's Evocation score, Collaboration score, and Autonomy/support score. Moyers et al. (2010) described the characteristics of the GR score as follows:

- **Evocation:** A clinician scoring proficient on Evocation is curious about the client, the client's ideas about change, and why change might or might not be a good idea. A clinician scoring low in Evocation might miss exploration of ambivalence and change talk; the clinician focused more on fact-gathering is more likely to provide information rather than elicit it.
- **Collaboration:** A clinician scoring high in Collaboration works with the client, is curious about client ideas, and seems to be synchronized with their client in a balanced exchange of leading and following. A clinician scoring low in Collaboration takes the expert role. Instead of a synchronized give and take process, the clinician is the leader.

- **Autonomy/Support:** A clinician scoring proficient in autonomy/support actively fosters the client's impression that the client has choice and control regarding the targeted behavior; the counselor encourages exploration of client choices. A low autonomy/support score indicates the clinician conveyed, through language, the lack of client choice or offered only one option to approach the targeted behavior.

According to Moyers et al. (2010), the percentage of MI adherent scores are derived from the ration of MI adherent (MiA) to MI non-adherent (MiN). The following are examples of MiA and MiN statements:

#### MiA

- Asking for permission before giving advice
- Affirming the client (commenting on effort, ability, strength)
- Emphasizing the client's control (freedom, ability to decide, choice)
- Supporting the client using compassion or sympathy

#### MiN

- Advising without permission
- Confronting or restating the negative
- Directing (giving orders or imperatives to the client)

The Motivational Interviewing Treatment Integrity (MITI) originated as a behavioral coding system used to increase the clinical skill in the practice of MI and many versions have evolved as research has progressed. A cost-effective and focused tool for evaluating MI competency, the current version MITI (3.1) is intended for use in MI clinical trials and for providing structured feedback to improve MI practice (Moyers, et al., 2010). The sensitive dependent measures, documented by pre and post-training samples, makes the MITI (3.1) a useful tool for providing feedback to MI students

(Moyers, et al., 2010). Permission for use of the MITI (3.1) in this research was obtained in writing from Theresa Moyers, Ph.D., an author of the MITI (3.1; Moyers et al., 2010).

The MITI (3.1) can be accessed and downloaded at:

*[http://casaa.unm.edu/download/MITI3\\_1.pdf](http://casaa.unm.edu/download/MITI3_1.pdf)*

A benefit of using the MITI (3.1) is its simplicity. The sole focus of the MITI (3.1) is on the counselor's behavior, not the client's behavior. It requires only one pass of a tape segment for coding rather than multiple passes required by the MITI (3.1)'s parent tool the Motivational Interviewing Skills Code (MISC), which codes both the counselor and client behaviors.

#### MITI (3.1) Reliability

The initial MITI scale and scoring manual were developed from an exploratory factor analysis to determine the MI dimensions measured by the parent assessment tool, the MISC (1.0; Miller & Mount, 2001; Moyers et al., 2005). Inter-rater reliability for the original MITI was assessed using three trained MITI coders. Intra class correlations ranged from .5184 for empathy/understanding (fair) to .9681 (excellent) and 70% of the ratings fell within in the excellent range (Moyers et al., 2005). The ability of the MITI to determine changes in counselor behavior was assessed with comparison of pre and post-training tapes of counselor behavior (Moyers et al., 2005).

Development of the MITI evolved with the identification of two global ratings, the spirit of MI and counselor empathy. Behavioral counts include the following categories: general information, MI adherent, MI-non adherent, closed questions, open questions, simple reflections, complex reflections, and total reflections. Scoring before

and after MI workshop behavior, MITI scores indicated sensitivity for detecting improvement after training and across the learning curve (Moyers et al., 2005).

### Procedure

Participants agreed to make ten 30-minute videotapes of MI counseling sessions with student-clients between 8-18 years old who were working on a targeted behavior. Students were enrolled in elementary, middle and high school. Videotapes were converted to FLV files and submitted on-line to the coders using the HIPAA-approved site, YouSendIt.com.

A random selection schedule for coding ten minutes of each of the participants' tapes was determined prior to the initiation of any videotape coding by using the random integer function on a TI 84 Calculator with 30 random numbers between 1 and 10. The coders coded the randomly assigned segments of the videotapes to determine participants' MI global scores and MI adherent behaviors using the MITI (3.1).

### Baseline

Participants began the baseline phase of this concurrent multiple baseline design by submitting tapes to the MITI (3.1) coders. Each participant submitted a total of ten, 30-minute Motivational Interviewing videotapes of counseling sessions with a student-client focused on a targeted behavior.

The participant order for implementation of the feedback and coaching intervention was randomly selected (Gast, 2010). The baselines for videotape submission were established in the following order:

- Participant 1: submit baseline tapes 1-3; begin intervention on tape 4.
- Participant 2: submit baseline tapes 1-5; begin intervention on tape 6.

- Participant 3: submit baseline tapes 1-7; begin intervention on tape 8.

### Intervention

At the onset of the intervention phase, participants continued to submit their 30-minute tapes for MITI coding. As participants began the intervention, 30 minutes of feedback and coaching supervision sessions were added to the research schedule. During all feedback and coaching supervision sessions, the supervisor used the following protocol:

- A. The supervisor used the previous MITI (3.1) scores as the format for providing the MI feedback and coaching supervision.
- B. The supervisor modeled the “spirit and style” of MI during each session.
- C. The order of the scores on the MITI (3.1) form was used as a protocol checklist to ensure the integrity of supervision for each session.
- D. Feedback and coaching sessions were conducted according to the following sequence for each feedback and coaching session:
  - a. General greeting/check-in;
  - b. Feedback on each MITI score and examples from the Global Ratings and from the Behavior Counts categories of the MITI;
  - c. Participant Questions reflections about their MITI scores;
  - d. Coaching using examples of MI responses, role plays, and examples of the participant’s MI consistent behavior in the tapes;
  - e. Checking for understanding with the participant; and

- f. Concluding reflections or comments from the participant and the supervisor.

### MITI Coding and Inter-Rater Reliability

Establishing the reliability of the coding decisions is the foundation for the visual and statistical analysis of data. According to Gast (2010), establishment of the reliability of coding decisions is vital for validating research using visual statistics. The inter-rater reliability for this study was calculated through the percentage agreement method (Gast). According to Moyers et al. (2005), the MITI inter-rater reliability for the MITI showed good to excellent results with intra class coefficients in the range of .6 to .9, in the good to excellent range. In a study of the MITI inter-rater reliability of undergraduate students trained as MITI coders, the intra class coefficients were in the range of .67 to .96, in the good to excellent range (Pierson et al., 2007). The MITI indicates good sensitivity for detecting improvement as a result of MI training, especially for coding basic skills basic MI skills (Moyers et al., 2010).

According to Moyers et al. (2010), on a 1-5 scale, the mean MITI (3.1) global rating score for a clinician with beginning MI proficiency is 3.5. The average MITI (3.1) global rating score for a clinician with MI competency is 4.0 and above. The average percentage of MI adherent score for beginning MI proficiency is 90%, and the average score for clinician competency is 100%.

The hypothesis posited there would be an increase in the MITI (3.1) global rating scores and an increase in the percent of MI adherent behavior during the intervention phase of the study. Data were analyzed using visual inspection of the mean MI global



rating score graphs (see Figure 1) and the mean percent of MI adherent behavior graphs (see Figure 2). Mean MITI (3.1) global scores and mean percent of MI adherent behavior were visually inspected for trends as the main method of evaluating the impact of feedback coaching supervision on the MITI (3.1) scores (Gast, 2010). In addition, an examination of the data included changes in means, levels, and trends. The analysis also included percentage of overlap across phases (Kazdin & Kopel, 1975).

## Results

### Data Collection and Analysis

Inspection of the graphs revealed a change from baseline to intervention for each of the participants' the mean MI global rating (GR) scores (see Figure 1). The increase in GR scores after intervention suggests a functional relationship between the feedback and coaching intervention and the increase in MI global rating scores. However, the data revealed no improvement in the percent of MI adherent (MiA; see Table 1); the scores did not show significant change from baseline to intervention. The percent of MiA scores began high and generally remained between 90-100% (see Figure 2).

In addition to using visual analysis, Riley, Tillman, and Burns (2009) suggested the use of effect-size calculations that suit the data. They cautioned that no effect-size metric should take precedence over visual analysis of intervention data. The researchers made the decision to calculate effect-size data for the MI Global rating scores, because visual analysis showed improvement in the mean MI Global rating scores. The researchers made the decision not to conduct further effect-size analysis on the MI adherent percentage scores, because the visual analysis of the percent of MiA scores

generally began high and remained high, showing little change from baseline to intervention.

To determine the effect size of the MI global rating scores from baseline to intervention, three calculations were used. First the Mean Baseline Difference (MBD) was calculated to quantify outcome behavior improvement between baseline and intervention. The MBD showed change for each participant's MITI Global Score from baseline through the study's intervention phase (see Table 2).

The Percent of Non-Overlapping Data (PND) notes the degree, across conditions between baseline and intervention of non-overlap of data points; data points from the intervention that did not overlap with data points from the baseline (see Table 3). The combined mean PND score for the three participants was 93.33%. According to Scruggs (as cited in Gast, 2010), above 90% is considered a highly effective treatment outcome.

The Percent of Data Exceeding the Mean or Baseline (PEM) was calculated to reduce the impact of data outliers on the calculation of effect size (see Table 4). The combined mean PEM for the three participants was 100% (Gast, 2010).

### Discussion

The demands of educational systems and the changes school counselors are currently facing make the use of evidence-based counseling interventions an ethical imperative. MI is an evidence-based practice for addressing behavior change, and it is becoming increasingly popular as an intervention in public education. However, MI is not easy to learn and according to research, ongoing coaching and feedback supervision

are considered best practices for maintaining and increasing MI proficiency (Miller & Rose, 2009).

A concurrent multiple baseline design across three participants ( $N=3$ ) was used to examine the impact of feedback and coaching supervision on school counseling graduate students' MI global scores and MI adherent behavior. The hypothesis stated that the feedback and coaching intervention would improve both the MI global scores and the MI adherent behavior on the MITI (3.1). While the intervention supports the hypothesis that the MI global rating scores would increase subsequent to feedback and coaching supervision, the percentage of MI adherent behavior percentage scores began high and remained high from baseline to intervention throughout each tier of the research. Changes in level and trend from baseline to intervention were observed for MI global rating scores when the feedback and coaching supervision was implemented as the independent variable for each tier of the study.

The researchers chose a concurrent multiple baseline design for this study to meet existing time limitations, cost limitations, and the recruiting limitations. The time limitation was the time of the year the study was initiated. It began in May, at the end of the school year. Although a non-concurrent multiple baseline design was considered, the concurrent multiple baseline design was chosen, because it took less time to implement and it required less coaching and feedback supervision session, which was more cost effective. The feedback and coaching supervision cost was also a factor in the decision to limit the study to three participants.

Instrumentation and procedural fidelity are the most common threats to internal validity when implementing a concurrent multiple baseline design. Procedural validity issues occurred during course of this research. Three issues of procedural fidelity may have influenced the results of this research. The research used randomized 10-minute segments of submitted videotapes for coding to decrease the demand on the coders and to keep the coding costs manageable. Although randomized 10-minute tape segments are used with the MITI (3.1), it is more typical for tapes to be coded with the MITI (3.1) using randomized 20-minute tapes.

The second issue is related to the intervention schedule. If the feedback and coaching supervision intervention had been implemented using the third, fifth, and seventh baseline videotapes instead of the fourth, sixth, and eighth videotapes, each participant would have had another intervention data point. Beginning the intervention on the fourth, sixth, and eighth videotape rather than the third, fifth, and seventh videotapes may have had an effect on the study's procedural fidelity and the results of the research.

During implementation of the concurrent multiple baseline design, an error in implementing the intervention for Participant 2 occurred. This error was caused by a communication problem between the researchers and the feedback and coaching supervisor. Inexperience with conducting a concurrent multiple design research may have been a contributing factor. The error occurred with Participant 2's first intervention. Participant 2 received the intervention after submitting the fifth tape for coding instead of the scheduled sixth tape. Upon receipt of the intervention, the participant's global rating

score increased from a mean score of 3.67 to a mean score of 4.2. Despite the mistake, there was an increase from baseline to intervention upon implementation of the independent variable. Yet, there is a question about how much the overall mean global rating scores would have increased if the intervention had taken place according to the concurrent multiple baseline design schedule.

Finally, the fact that research was designed with one supervisor designated to provide the feedback and coaching supervision decreases the claim that this study is generalizable and raises a question. Did the mean global rating scores increase because of the feedback and coaching supervision or did the participant's relationship with the supervisor influence the increase in mean global rating scores? Designing a multiple baseline study with more than one supervisor would eliminate this question.

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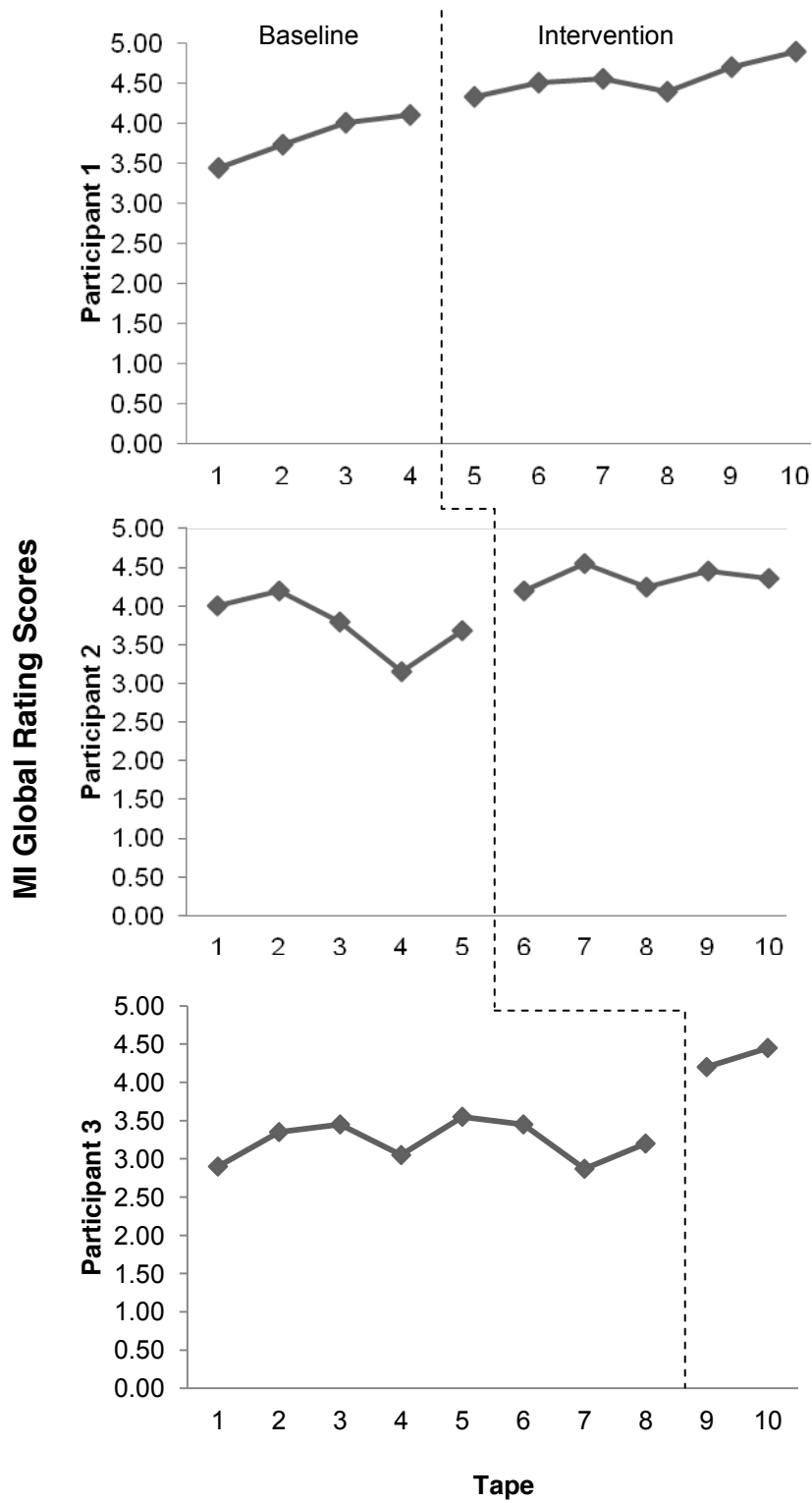


Figure 1. Figure 1 Results of Mean MI Global Rating Scores From Baseline through Intervention.

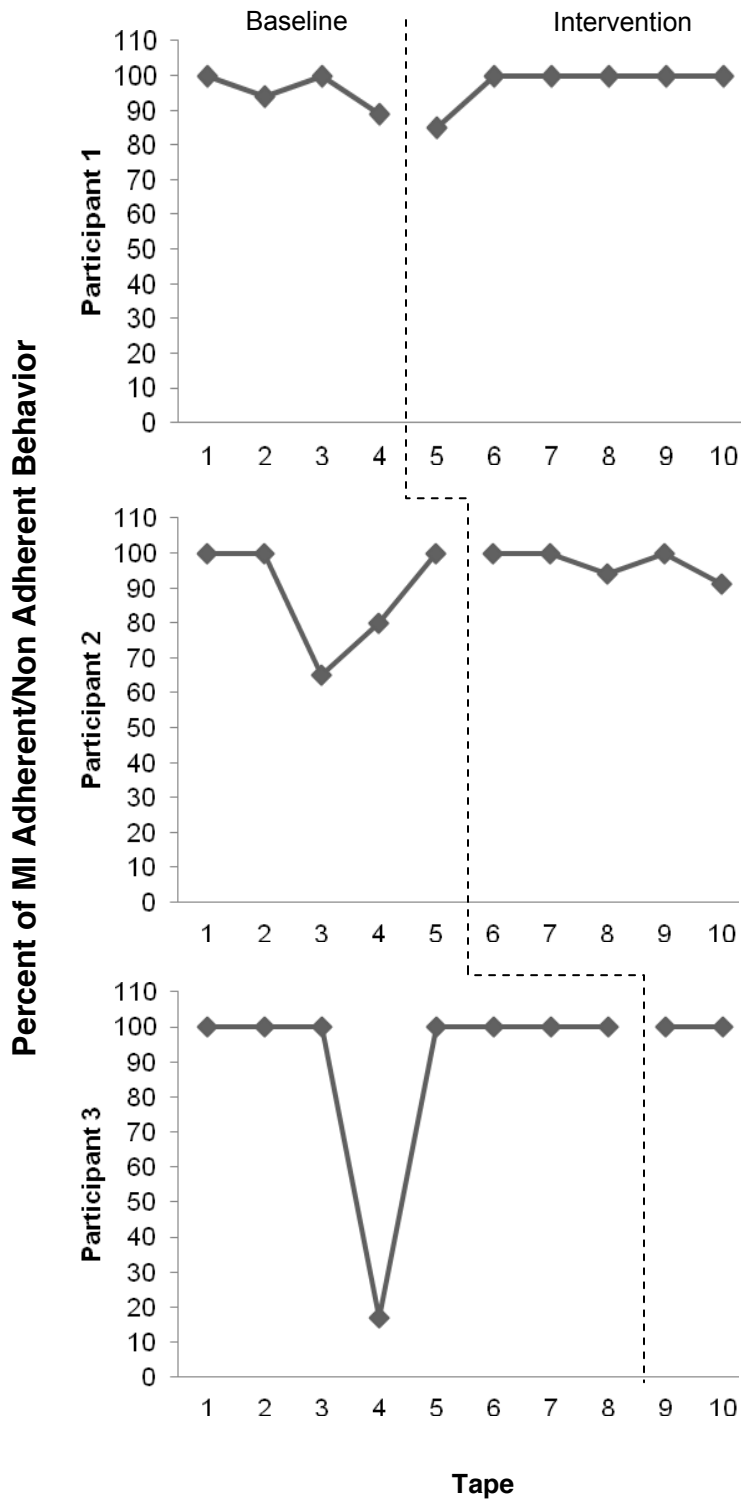


Figure 2. Percent of MI Adherent/non Adherent Behavior from baseline through intervention

Table 1

*Percent of Motivational Interviewing Adherent Behavior (% MIA)*

Participant	Percent by Tape									
	1	2	3	4	5	6	7	8	9	10
1	100	94	100	89	85	100	100	100	100	100
2	100	100	65	80	100	100	100	94	100	91
3	100	100	100	17	100	100	100	100	100	100

*Note.* % MIA > 90% indicates beginning MI proficiency, 100% indicates competency (Moyers et al., 2010).

Table 2

*Mean Baseline Difference (MBD)*

Participant	B-Sum	B-Mean	I-3	IMean = IM	(IM-BM)	MBD:
						Diff/BL*100
1	15.28	3.82	27.38	4.56	0.74	19.37%
2	18.83	3.77	21.80	4.36	0.59	15.65%
3	25.82	3.23	8.65	4.33	1.10	34.00%

*Note.* MBD provides an index for level of behavior change across baseline-intervention conditions (Gast, 2010).

Table 3

*Percent of Non-overlapping Data (PND)*

Participant	Intervention Points	Non-overlapping	PND (%)
1	6	6	100
2	5	4	80
3	2	2	100

*Note.* The NPD ranges from 0 to 100; a PND of 70-90% is considered fair. Treatment outcome, a PND greater than 90% is considered a highly effective treatment (Gast, 2010).

Table 4

*Percent of Data Exceeding the Mean (PEM)*

Participant	No. of trials	Median Baseline Score	PEM (%)
1	6	3.87	100
2	5	3.80	80
3	2	3.28	100

*Note.* The PEM was used to reduce the impact of data outliers on mean effect size (Gast, 2010).

## Chapter 4

### The Impact of Coaching and Feedback Supervision on School Counseling Graduate Students' Motivational Interviewing Skills

#### General Conclusion

Motivational Interviewing (MI) and current trends in school counseling were the thematic focus of this dissertation. Review of the literature asserted that there is a need for the implementation of evidence-based interventions focused on behavior change in K-12 schools. The review of the literature also asserted that MI is considered an evidence-based practice, revealing promising research results with both the adult and adolescent populations. Currently, educators and school counselors report training and use of MI approaches in school settings, yet little research on the use of MI and school counseling was found. The primary instrument of interest in this dissertation was the use of the Motivational Interviewing Treatment Integrity (MITI; 3.1) to measure improvement in MI global rating and percent of MI adherent behavior before and after feedback and coaching supervision.

The researchers in this study wanted to discover the impact of feedback and coaching supervision on school counselors trained in MI. It is this authors' experience as a school counselors that school counselors are generally enthusiastic about learning new evidence-based methods for improving their practice as school counselors. However, after receiving training, school counselors often have no time to implement or practice newly learned skills. Further, school counselors most often do not receive any type of supervision or feedback to support the implementation of their new learning. Due to the variety of demands on school counselors, training manuals can land on the shelf of a

bookcase, consequently, left to collect dust while the potential for maintaining newly acquired skill deteriorates.

The study presented provides empirical evidence suggesting that school counselors trained in a two day beginning MI workshop, followed by subsequent feedback and coaching supervision, produced increased mean MITI global rating scores. An increase in the MITI (3.1) global rating scores showed that the research participants increased their ability to understand and apply the “essence of” Motivational Interviewing and its foundation by using the spirit and style of MI. While the percent of MI adherent behavior did not increase, a related factor this may have been the level of counselor proficiency from the beginning MI training. Another thought is that each of the participants was enrolled in group supervision independent of the research. Prior to participation, the participants agreed not to share the MI tapes or any information regarding the study with their supervision groups, perhaps the supervision groups impacted the percent of MiA scores.

### Recommendations for Future Research

Research to further understand the impact of training school counselors in MI and the process of implementing MI in schools are important. Since the public school system is prescriptive by nature and school counselors feel a great deal of pressure to assume the roles of “vessels of information” and “problem solvers,” learning MI with the benefit of feedback and coaching supervision could assist counselors to use the spirit of MI and assume a more collaborative counseling style. A qualitative study of the experience of school counselors’ MI training experiences and the implementation process

at school seems worthwhile to pursue. Identification of barriers to implementing Motivational Interviewing in educational settings, as well as the participants' MI supervision experience with feedback and coaching supervision, would inform future MI training and application in schools.

Another recommendation for the future might be replication of the study with a larger population of school counseling students and/or practicing school counselors. By highlighting MI training and feedback and coaching supervision, school counselors may benefit from increased opportunities for growth. As the dramatic changes in school culture are implemented and state and national demands on school counseling practices increase, school counselors may benefit from increased supervision support resulting in increased MI skills and MI self-efficacy.

Since the demands of the school day are heavy and school counselors seldom have time for more than 20 to 30 minute client sessions, development of a MI style specific for use in school settings is needed to increase the relevance of implementation. An MI style for the school settings might fit between the 10-minute MI style used by physicians or medical practitioners and the 50-minute therapeutic style used by therapists and addictions counselors.

Finally, this research was conducted during the final weeks of the school year, a typically busy time of year for school counselors. In addition to the busy school schedules including field trips, graduations, standardized testing, and unforeseen events, there are myriad emotional issues that students and school counselors deal with as the school year culminates. Conducting the research at the end of the school year may have



posed an additional challenge for the participants and their students. It was sometimes difficult for the research participants to schedule videotaping sessions around the multitude of “end of the school year” activities. As such, the research may have created extra stress for the research participants. On the other hand, participating in the research seemed beneficial; the participants had the advantage of 30 minutes of feedback and coaching supervision to support their self-efficacy as school counselors learning Motivational Interviewing.

In summary, this study revealed useful information and explored topics worthy of further research. Using an MI approach in school counseling programs promises to be beneficial to school counselors. By broadening their experiences with MI, school counselors and students will enjoy the benefits of an effective intervention for behavior change and students will learn to collaborate and make changes relevant to their personal goals and aspirations. Continuing to explore the possibilities for implementing MI in school counseling programs is in the best interest of school counselors and students alike.

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