An Exploration of Motivational Interviewing and Strengths-Based Supervision to Improve Client Session Attendance

Jeremy Abel

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AN EXPLORATION OF MOTIVATIONAL INTERVIEWING AND STRENGTHS-BASED
SUPERVISION TO IMPROVE CLIENT SESSION ATTENDANCE

A Dissertation
Submitted to the School of Education

Duquesne University

In partial fulfillment of the requirements for
the degree of Doctor of Philosophy

By

Jeremy Abel

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AN EXPLORATION OF MOTIVATIONAL INTERVIEWING AND STRENGTHS-BASED SUPERVISION TO IMPROVE CLIENT SESSION ATTENDANCE

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ABSTRACT

AN EXPLORATION OF MOTIVATIONAL INTERVIEWING AND STRENGTHS-BASED SUPERVISION TO IMPROVE CLIENT SESSION ATTENDANCE

By

Jeremy Abel

2019

Dissertation Supervised by Debra Hyatt-Burkhart

Clients missing outpatient psychotherapy sessions is a problem that impacts clients, clinicians, and clinics. Scholarly research has shown that clinicians’ use of Motivational Interviewing (MI) may help to increase attendance rates and that most often MI training is done through a single training or workshop, which may not be a sufficient means to adequately prepare clinicians to effectively use MI. The purpose of this study was to determine whether using every other week, MI-focused, strength-based group supervision after an initial MI training can increase client attendance in two community outpatient substance use disorder and mental health treatment clinics. This study investigated the client attendance rates of seven clinicians that participated in a Quality Improvement Project before and after the project, and also compared those attendance rates to clinicians from the same agency who did not participate in the project. This study investigated whether holding a professional license and the number of
years in the counseling field impacted differences in client attendance. Suggestions for future research include investigating the use of a MI fidelity tool to provide regular feedback to clinicians to reflect their use of MI, exploring the role that clinician and client demographics have in attendance, using different theoretical orientations to group supervision (cognitive behavioral therapy, psychodynamic, feminist, developmental, etc.), and conducting MI supervision over longer periods of time and having supervision less frequently.
DEDICATION

This paper is dedicated to my grandmother who taught me what unconditional love meant, and to my father who always encouraged me to never stop learning.
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CHAPTER 1

Introduction

Myriad providers of outpatient psychotherapy frequently have to find ways to manage the common issue of clients missing appointments (DeFife, Conklin, Smith, & Poole, 2010; Lasser, Mintzer, Lambert, Cbral, & Bor, 2015). Client failure to attend appointments especially plague community agencies that serve clients with substance use disorders (Secades-Villa, Fernande-Hermida, & Arnaez-Montaraz, 2004, Carroll et al., 2006; Loveland & Driscoll, 2014). Missed appointments by clients can often lead to several issues that can negatively impact the clinics, the clients, and the clinicians providing treatment (Curran, Stecker, Xiaotong, & Booth, 2009; LeGanga & Lawrence, 2007; Leichsenring & Rabung, 2008, Edlunnd et al., 2002).

There is a body of scholarly research that provides some evidence that through the use of a style of counseling called Motivational Interviewing (MI), treatment session attendance rates can be increased (DeFife, Conklin, Smith, & Poole, 2010; Secades-Villa, Fernande-Hermida, & Arnaez-Montaraz, 2004; Lundaahl et al., 2013). Research has also demonstrated that many common practices of training clinicians in MI have largely been unsuccessful (Madson, Loignon, & Lane, 2009; Schwalbe, Oh, & Zwenben, 2014; Martino, Ball, Nich, Frankforter, & Carroll, 2008.) Without providing ideal training experiences, MI skill acquisition may not be reached, and therefore the potential positive effect of MI in regard to client attendance may not attained (Miller, Yahne, Moyers, Martinez, & Pirritano, 2004; Martino, Ball, Nich, Frankforter, & Carroll, 2008; Madson, Schumacher, Baer, & Martino, 2016; Forsberg, Forsberg, Lindquist, & Helgason, 2016; Schwalbe, Oh, & Zweben, 2014).

A major problem with many MI training programs is that research has shown that a single MI training or workshop is rarely a sufficient means to effectively train someone in MI
and does not lead to long-term skill retention (Forsberg, Forsberg, Lindquist, & Helgason, 2016; Madson, Schumacher, Baer, & Martino, 2016; Schwalbe, Oh, & Zweben, 2014). While an initial MI training may be a good starting point, in order to provide longer-term effective MI skill acquisition and retention, follow-up learning experiences are also required (Miller, Yahne, Moyers, Martinez, & Pirritano, 2004; Martino, Ball, Nich, Frankforter, & Carroll, 2008; Madson, Schumacher, Baer, & Martino, 2016; Forsberg, Forsberg, Lindquist, & Helgason, 2016; Schwalbe, Oh, & Zweben, 2014).

This research study thought that an effective and efficient means of providing follow-up MI learning experiences is through strength-based, MI-focused, group supervision. The strength-based model of supervision is an effective model that focuses on clinicians’ positive attributes, strengths, and psychological assets (Kobau et al., 2011; Seligman, Steen, Park, & Peterson, 2005; Ruby, 2017). This research study provided strength-based, MI focused, group supervision to two groups of clinicians in two separate outpatient clinics every other week for five months in order to support ongoing MI skill acquisition and effective MI use and therefore increase client show-rates.

**Statement of the Problem**

Two common frustrations for psychotherapy providers are missed appointments and last minute cancellations (DeFife, Conklin, Smith, & Poole, 2010). Unfortunately, clients missing appointments is a frequent occurrence in outpatient psychotherapy with multiple deleterious consequences (Lasser, Mintzer, Lambert, Cbral, & Bor, 2015). Some of the costs to treatment providers of clients missing appointments are lost revenue, a reduction in providers productivity, clinic efficiency is reduced, and an increase in administrative work can occur caused by having to contact and reschedule appointments (LeGanga & Lawrence, 2007; Bech, 2005; Torres et al.,
Missed appointments also affect clients by reducing the effective capacity of treatment providers leading to longer waiting lists to get into treatment, they can cause an increase in the costs of services, they can negatively impact the quality of care provided and overall satisfaction with treatment, and missed appointments often lead treatment providers to prematurely terminate clients from treatment resulting in poorer treatment outcomes (Torres et al., 2015; Berrigan & Garfield, 1981; Norris, Kumar, Chand, Moskowitz Shade, & Willis, 2014). Lastly, missed appointments also impact clinicians providing treatment by reducing their productive time and revenue generated, increase collateral work, sometimes cause a reduction in direct income, and missed appointments are an ineffective and inefficient use of staff time that can induce frustration or demoralization (Bech, 2005; Defife, Conklin, Smith, & Poole, 2010; Torres et al., 2015). Research by Craig and Olson (2004) also found a high correlation between missed appointments with the length of stay in treatment. These combined factors can make providing effective outpatient treatment a challenge, especially to individuals with substance use disorders.

There are several contributing factors that may explain why individuals have now show rates for appointments. A body of research has extensively explored factors that lead to missed psychotherapy and other healthcare appointments. Torres et al. (2015) and Molfenter (2013) determined that some of the primary factors that that lead to missed appointments were wait time from scheduling to the actual appointment, the percentage of previously missed appointments (Torres et al., 2015), physical and emotional problems (Defife, Conklin, Smith, & Poole, 2010), and negative reactions to clinical interventions (Defife, Conklin, Smith, & Poole, 2010; Molfenter, 2013). Molfenter’s (2013) research confirmed that behavioral strategies like MI and contingency management, a type of behavioral therapy where clients are rewarded for positive
changes, can strongly influence show rates while also increasing the therapeutic engagement between client and clinician. Supporting Molfenter’s (2013) findings, Defife, Conklin, Smith, and Poole (2010) determined from their work that when clients did not feel that they had a strong therapeutic alliance or had a negative reaction to the therapeutic intervention, they were more likely to miss appointments.

A body of scholarly research has gleaned that through the use of Motivational Interviewing (MI), a directive, client-centered style of counseling, client retention and attendance rates can be improved (Carroll et al., 2006; Secades-Villa, Fernande-Hermida & Arnaez-Montaraz, 2004; Rollnick & Miller, 1995). MI was first described by Miller (1983) as an approach to working with problem drinkers and based on principles of social psychology that place a heavy emphasis on “individual responsibility and internal attribution of change.” The central purpose of MI is for the clinician to take a directive approach in examining and resolving a client’s ambivalence (Rollnick & Miller, 1995). Miller and Rollnick (1995) describe MI as a more focused and goal-directed form of counseling as compared to other nondirective styles.

When MI was incorporated into initial outpatient client assessments, Carroll et al. (2006) found that participants were more likely to stay enrolled in a community treatment program as compared to those who were assessed using a standard intervention. Secades-Villa, Fernande-Hermida, and Arnaez-Montaraz (2004) also found that using MI in outpatient substance use treatment sessions could increase client retention rates. They found that most clients drop out of treatment in the early phases of treatment and using MI may be an effective intervention to reduce treatment drop out rates that frequently occur soon after admission (Secades-Villa et al., 2004). In a meta-analysis of the effects of MI in a general medical care setting, Lundahl et al. (2013) found that in a medical care setting MI had a significant and positive effect on several
patient outcome measures, including engagement in treatment and intention to change. This research also concluded that MI can be used by medical professionals to help patients lose weight, lower blood pressure, exercise more, as well as to reduce substance use and increase self-efficacy in making health-related decisions (Lundahl et al., 2013).

Research by Dean, Britt, Bell, Stanley, and Collings (2016) examined the effects of using a single session of MI with adolescents diagnosed with mood disorders before beginning a standard mood disorder group treatment. They concluded that participants who received a session of MI compared to a standard session were more likely to attend the proceeding group treatment sessions afterwards and have a higher reported readiness to begin treatment (Dean, Britt, Bell, Stanley, & Collings, 2016). Scholarly work by Smith, Hall, Jang, and Arndt (2008) found that by using the Strengths-Oriented Referral for Teens (SORT), an MI treatment referral intervention for addressing ambivalence, they were able to increase the probability of attendance in the initial treatment session of substance-misusing teenagers. When clinicians are rated as having a greater level of adherence to MI in sessions, clients tend to report an increase in overall motivation to reduce or stop substance use and they were significantly less likely to test negative for drugs during treatment (Martino, Ball, Nich, Frankforter, & Carrol, 2008).

Conversely, research by Mullins, Suarez, Ondersma, and Page (2004) revealed that there were no differences in treatment engagement or retention when comparing a group where MI was used to a control group who watched educational videos in women court mandated to treatment. Similarly, Miller, Yahne, and Tonigan (2003) found no attendance effect in respect to the use of MI in a large sample of adults receiving substance use treatment in outpatient and inpatient treatment. Comparable scholarly research by Mullins, Suarez, Ondersma, and Page (2004) and Wolf (2008) has concluded that using MI in treatment produces no significant effect
to client treatment engagement or number of sessions attended. In the study by Wolf (2004) examining whether including MI in the initial phase of intensive outpatient substance use treatment increased the number of days of treatment, no statistically significant effect was found between a group where MI was used to a control group who received the standard treatment of the Intensive Outpatient (IOP) program services.

However, in the aforementioned research by Wolf (2008), the treatment sessions were not recorded and fidelity to MI was not measured. The lack fidelity measurement made it difficult to know how well the clinician actually implemented MI in the sessions that were used in this research. While the psychologist conducting MI interventions in Wolf’s (2008) research had been trained in MI and it was indicated that he had been practicing MI for seven years, his self-report may not be a good indicator of MI proficiency. Research by Wain et al. (2015) and Miller, Yahne, Moyers, Martinez, and Pirritano (2004) found that clinician’s self-reported MI ability was not a good indicator of their objectively measured skill. Clinicians tended to rate themselves higher in competency in MI and use of MI strategy as compared to independent observers in recorded sessions (Wain et al., 2015; Miller, Yahne, Moyers, Martinez, and Pirritano, 2004). Clinicians tendency to over-rate themselves in MI competence and use is consistent with research by Decker and Martino (2013) and Martino et al. (2009) that found clinicians’ self-report was not a reliable tool to assess MI adherence or ability. Miller and Mount (2001) also concluded that MI trainees frequently reported an increase in perception of proficiency in MI despite demonstrating a deficiency in corresponding change in skills. Without using an objective assessment tool to measure adherence to clinicians’ fidelity to MI practice, fidelity to MI cannot be accurately measured.
Attendance Rates

While there is conflicting data confirming whether or not using MI can increase client attendance, some scholarly research does suggest that proficient use of MI by trained clinicians may increase client attendance rates (Smith, Hall, Jang, & Arndt, 2008; Carroll et al., 2005; Lundahl et al., 2013). Recent research has also found that in order for clinicians to use MI effectively and maintain proficiency in MI skills over time, more than just a single training or workshop is required (Madson, Schumacher, Baer, & Martino, 2016; Forsberg, Forsberg, Lindquist, & Helgason, 2016; Schwalbe, Oh, & Zweben, 2014; Hall, Staiger, Simpson, Best, & Lubman, 2015). The originators of MI, Steven Rollnick and William Miller (1995), stressed that MI is a style of counseling that requires thorough and careful training, not just a set of specific counseling techniques.

Upon completion of a single MI training or workshop, attendees typically demonstrate immediate MI skill gains, but the gains are not always sustained (Martino, Ball, Nich, Frankforter, & Carroll, 2008; Schwalbe, Oh, & Zweben, 2014; Hall, Staiger, Simpson, Best, & Lubman, 2015). Numerous research studies have indicated that with post-workshop coaching and feedback MI skills gains are considerably more likely to be maintained and proficiency sustained over time (de Roten, Zimmerman, Ortega, & Despland, 2013; Hall, Staiger, Simpson, Best, & Lubman, 2015; Schwalbe, Oh, & Zweben, 2014). Forsberg, Forsberg, Lindquist, and Helgason (2010) found that in order to gain competence with MI, ongoing supervision which includes feedback and monitoring is essential. These finding are consistent with research by Martino et al. (2008) which demonstrated a highly effective means of training clinicians in MI is through the combination of expert-led workshops followed by regular clinical supervision that contained recorded client sessions and MI coaching.
Another issue that arises for those clinicians that have had a single MI training or workshop without any follow-up training or follow-up MI supervision is that it can be difficult to suppress previous counseling habits that may be inconsistent with MI (Miller & Mount, 2001). Miller and Mount (2001) found that clinicians that completed an MI training or workshop often did incorporate newly acquired MI skills into their work with clients, but by continuing to use confrontational responses, a practice not consistent with MI, client responses to clinicians did not change. MI is considered by many experts to be a multifaceted counseling approach that requires extensive practice and time to master (Rosengren, 2009; Miller, Yahne, Moyers, Martinez, & Pirritano, 2004). Without sufficient training and follow-up, not only is MI hard to attain proficiency in, old tendencies can interfere in the learning process.

As a number of research studies have demonstrated, self-report may not an accurate method of assessing clinician MI skills or fidelity of MI during clinical sessions (Wain et al., 2015; Decker & Martino, 2013; Martino et al., 2009). Forsberg, Forsberg, Lindquist, and Helgason (2010) and Martino et al. (2009) recommend monitoring MI fidelity through a MI behavior-coding tool. There are several MI coding tools used to measure fidelity of MI in therapy sessions. Some of the more widely used MI coding tools are the Client Language Easy Rating, (CLEAR) Coding System (Glynn & Moyers, 2012), the Motivational Interviewing Treatment Integrity coding manual (MITI) (Moyers, Manual, & Ernst, 2014), the Motivational Interviewing Competency Assessment (MICA) (Jackson, Butterworth, Hall, & Gilbert, 2015), and the Motivational Interviewing Assessment Scale (MIAS) (Campiñez Navarro et al., 2016).

The MISC is a coding instrument that was created in order to measure fidelity of MI in therapy sessions by identifying relational and behavioral characteristics (Lord et al., 2015). While the MISC was designed to measure adherence to MI, de Jonge, Schippers, and Schaapp
(2005) found it to be a useful for conducting research, but that it required too much training to be practical for teaching and as an MI supervision tool. The MIAS is a MI coding tool that was created for use in primary healthcare settings (Campiñez Navarro et al., 2016). Research has shown that the MIAS demonstrates homogeneity, good internal consistency, and is much shorter than similar instruments, but that it is not a practical tool to use in a therapy setting (Campiñez Navarro et al., 2016).

The MICA is a MI coding tool designed to evaluate a clinician’s clinical conversation and assesses verbal interventions and MI intentions (Jackson, Butterworth, Hall, & Gilbert, 2015). This tool measures baseline MI competence and is designed to provide clinicians with specific feedback in order to assist them in developing their MI skills (Jackson, Butterworth, Hall, & Gilbert, 2015). The MITI is described as a behavior coding system that evaluates how well a clinician is using MI (Moyers et al., 2014). The MITI does this through providing feedback that can be used to assist clinicians in improving their MI clinical skills by assessing clinician's attention to client language, increased rigor in assessing autonomy support and client choice, and the use of persuasion when giving information and advice (Moyers et al., 2016).

**Purpose and Research Questions**

The purpose of this study is to determine whether using every other week, MI-focused, strength-based group supervision after an initial MI training can increase client attendance in a community outpatient substance use disorder and mental health treatment clinic. This study will compare the client attendance rates of seven clinicians from two outpatient sites before the MI training and group supervision began and one month after it was completed. It will further compare the attendance rates of clinicians from the same agency that participated in this study to
those of clinicians who did not participate. Also, this study will investigate whether holding a professional license and the number of years in the counseling field impacted client attendance.

The central research question is, how does using MI-focused, strength-based group supervision for five months following an initial MI training influence the show rates of clients in a community outpatient site? This study also examined if there were differences in the show rates of those clinicians who participated in the QI Project compared to clinicians from the same agency who did not participate? Also, were differences in attendance rates influenced by years of counseling experience? And were differences in attendance rates influenced by whether the clinician held a professional counseling license?

**Statement of Potential Significance**

This study will benefit outpatient mental health and substance use disorder treatment sites by offering a means to increase client attendance of treatment. In an industry where client attendance is low, budgets are tight, and providers can ill afford to underutilize resources, it is imperative to find solutions that increase the rates of attendance. As mentioned previously, missed appointments can reduce the effective capacity of treatment providers, can cause an increase in the costs of services, and missed appointments can negatively impact the quality of care and satisfaction with treatment (Torres et al., 2015; Berrigan & Garfield, 1981; Norris, Kumar, Chand, Moskowitz Shade, & Willis, 2014). By increasing show rates, each of these factors can be mitigated, in effect increasing the efficiency of the clinics that employ effective training and support of MI usage in their facilities.

Consumers of mental health and substance use disorder treatment can also benefit from this research. Clients cannot reap the benefits of treatment if they are not present. MI offers a means to increase the likelihood that clients attend treatment sessions, therefore increasing the
potential positive outcomes of treatment. As research has shown that lower attendance rates leads to premature termination of clients from treatment resulting in poorer treatment outcomes, MI offers a way to reduce both missed appointments the indirect effects on clients. This study can also benefit direct providers of treatment. Research has demonstrated that missed appointments often cause clinicians wasted time, increased collateral work, a reduction in direct income, and can lead to frustration (Bech, 2005; Defife, Conklin, Smith, & Poole, 2010; Torres et al., 2015). By providing an effective means to decrease missed appointments, the aforementioned factors can also be mitigated.

**Summary of Methodology**

This research study was a quality improvement project that was implemented because a community treatment agency was looking for ways to improve client show rates of outpatient appointments. Seven participants were chosen voluntarily from two outpatient sites from the same agency, both sites provide mental health and substance use disorder treatment. These seven participants recruited were volunteers. All clinicians from both sites were offered the opportunity to participate in a free MI training followed by five months of MI-based group supervision, seven agreed to participate. Participation in this study was provided as a function of their regular job. The project began with an initial six-hour MI training was conducted by an experienced MI training facilitator from outside of the agency. Two weeks following the initial training, every other week, MI-focused, strength-based group supervision was conducted at each site with the purpose of enhancing and continuing to develop MI knowledge, skills, techniques, and providing opportunities for peer support and receiving direct, strength-based feedback.

The seven participants were asked to provide audio recordings of five of their sessions throughout the course of this project. They were asked to do at least one session recording each
month of the project, at least five total recordings but more than five recordings was encouraged. The purpose of the audio recordings was to monitor fidelity of MI skill usage. The recordings were coded using the Motivational Interviewing Treatment Integrity Coding Manual 4.2.1 (Moyers et al., 2014).

**Statistical Analysis**

This quality improvement project investigated two primary questions. The first question is whether there was a change in client show rates for those clinicians who participated in the project before it began compared to after it was complete six months later? The second question was whether there was a significant difference in the client show rates of those clinicians that participated in the project compared to those who did not participate. To investigate the data from the first research question a repeated measures ANOVA was used. The second research question was analyzed using a two-way repeated measures ANOVA. The third and fourth research question were analyzed using a multiple regression analysis.

**Limitations**

There were several limitations of this study. First, the sample size was small. There were seven participants in this study, therefore limiting the statistical power and making it is difficult to make generalizable inferences about the results. Secondly, one of the sites had considerably more clients that had a mental health diagnosis, whereas the other site had considerably more clients who had a substance use disorder diagnosis. A client’s primary diagnosis may have been a factor in attendance rates and the diagnosis of each client was not able to be captured for each clinician.
There was a wide variance in number of years practicing counseling between the participants. One clinician was in the final semester of graduate school, two had less than two years experience, one had six years experience, three had seven years experience, and another had 15 years experience. The clinicians who worked in the counseling field longer may have been more grounded in their previous approach to counseling and may have had a more difficult time abandoning their MI inconsistent habits.

Three of the clinicians had previous MI training and did not participate in the initial training provided two weeks before the MI supervision began. Those clinicians likely received a different initial MI training, as there is no standard MI training protocol. Another limitation is that one site was unable to provide audio recordings, therefore MITI scores were not provided and the fidelity of MI could not be measured. Also, the clinicians that did provide audio recordings were not each able to provide the same number nor were they evenly distributed over time. This may not have accurately reflected the MI skills gains for each clinician, or the gains over the five months of supervision. Lastly, it was not possible to assess how well a strengths-based approach to group supervision was used during supervision as strengths-based supervision has no specific skills to be measured.
CHAPTER 2

Literature Review

This review of scholarly research will illustrate the significance of the quality improvement project that forms the basis of this study. It will explain what motivational interviewing (MI) is and how it works, highlight some of the criticisms of MI and what effective training is, discuss different forms and approaches to clinical supervision, and describe how this quality improvement project can increase client attendance for outpatient therapy appointments.

It is widely known among providers of outpatient psychotherapy that an issue that commonly occurs is clients missing appointments (Meichenbaum & Turk, 1987; Booth, Cook, & Blow, 1992; VA Office of Inspector General, 2008; DeFife, Conklin, Smith, & Poole, 2010; LaGanga & Lawrence, 2007). When clients miss appointments there is an impact upon the clinics that offer services, the clinicians providing services, and clients who use those services (DeFife, Conklin, Smith, & Poole, 2010; Lasser, Mintzer, Lambert, Cbral, & Bor, 2015). Missed appointments often cause a loss in revenue, negatively effect providers productivity, lead to reductions in clinic efficiency, increase administrative work, can lead to longer wait times to get into treatment by increasing the effective capacity of treatment providers, and can cause poorer treatment outcomes when treatment provider are forced to prematurely terminate clients from treatment (LeGanga & Lawrence, 2007; Bech, 2005; Torres et al., 2015; Molfenter, 2013; Berrigan & Garfield, 1981; Norris, Kumar, Chand, Moskowitz Shade, & Willis, 2014).

This study, which was born from a quality improvement project that employed Motivational Interviewing (MI) and strengths-based focused supervision, sought to explore the impact of a five-month group supervision on outpatient psychotherapy client show-rates. The
quality improvement project trained outpatient therapists in MI and provided follow up, every other week strengths-based group supervision with the intention that these interventions would translate into an increase in client show rates.

**Motivational Interviewing**

Motivational Interviewing (MI), a directive, client-centered approach to counseling that assists clients in exploring and resolving feelings of ambivalence, was first introduced in 1983 in an article by William Miller examining MI’s effects on problem drinkers (Miller, 1983, Rollnick & Miler, 1995). Miller’s ideas about MI were groundbreaking in the world of alcohol addiction psychotherapy at the time he published his article in 1983. Miller (1983) contradicted some of the schools of thought about the personality characteristics and stereotypes of alcoholics to which many addiction clinicians clung during that period. Quaranta (1947) described the common alcoholic personality as often unstable, compulsive liars, disorganized, compulsive, impulsive, and oblivious to common social values. Other early research attributed the characteristics of immaturity, narcissism, and self-centeredness to alcoholics (as cited in Chaplin & Orlofsky, 1991).

Early clinicians believed that people with drinking problems primarily had issues with motivation and only after hitting “rock bottom” would they be ready to begin treatment (Miller, 1983). During the period that Miller wrote his first article about problem drinkers, one of the most common means to recovery from addiction was through the Alcoholics Anonymous program. Miller (1983) points out that the Alcoholics Anonymous book supports the idea that it is solely through one’s own personal failings that prevent successful recovery from addiction. It is written in the Alcoholics Anonymous (1955) book that :"Rarely have we seen a person fail who has thoroughly followed our path. Those who do not recover are people who cannot or will
not completely give themselves to this simple program, usually men and women who are constitutionally incapable of being honest with themselves.” Nascent addiction treatment was also commonly thought to fail due to lack of client’s motivation caused by denial, resistance, defense mechanisms, being oppositional, and the personality traits of clients (Miller, 1985; Miller, Sovereign, & Krege, 1988; Miller & Rollnick, 2013). In contrast, Miller (1983) believed that clients’ denial, something that many professionals during the time of early addiction treatment thought of as a personality trait common in alcoholics, was indeed at the root of many problems in addiction therapy. However, he described denial not as an intrinsic characteristic in those with drinking problems, but a direct result of the way that clinicians interacted and communicated with clients and most often as the result of the approach to therapy with that client (Miller, 1983). The phenomenon of denial, Miller argued, occurred when clinicians presented one side of an argument to a client during a therapy session in order to convince him or her to make a change (Miller, 1983). The natural response of the clients trying to be “convincing” to make a change was to present opposing arguments (Miller, 1983).

Another client behavior that many early addiction clinicians felt got in the way of successful treatment was resistance (Rollnick and Miller, 1995). Rollnick and Miller (1991) described resistance as a form of counter-motivation that impeded clients’ progress. The concept of counter-motivation recognizes that people often have very good reasons for continuing to engage in the behavior that they are trying to change, including low self-efficacy, hopelessness, and deriving enjoyment from some parts of the way of life surrounding the behaviors that brought them to treatment (Miller & Rollnick, 1991). By labeling a behavior pejoratively, like calling it resistance, it may lead the clinician to see the behavior negatively and, therefore, more likely to challenge or confront the client in a way that elicits defensiveness (Miller & Rollnick,
1991; Rollnick & Miller, 1995). Miller and Rollnick (1991, 1995) believed that using negative labels for behaviors had the opposite effect of the intended outcome for using this language, did not benefit the therapeutic process, and advised clinicians to steer clear of it.

Another clinician behavior that Miller and Rollnick (2013) often found to be a barrier to successful treatment is the “righting reflex.” The “righting reflex” is the idea of trying to convince clients to make a change, Miller and Rollnick (2013) described it as “the desire to fix what seems wrong with people and to set them promptly on a better course.” Miller (1983) also postulated that by attempting to persuade or make a direct argument with clients to make a change, the individual becomes more resolute in their own view and not towards change as they naturally think of reasons not to change and, therefore, defend their position. Clients becoming more steadfast in their perspective as they verbally defend their position in a therapy session is supported by the psychological principle that one learns what they believe as they hear themselves talk (Miller, 1983; Bem, 1972). This solidification of a client’s perspective can be both positive and negative depending on the particular issue. Clinicians who assist clients in finding their own voice and guide them down the path tend to have more successful outcomes than those who are authoritarian (Miller, 1983; Bem, 1972; Miller and Rollnick, 2013).

Addiction treatment during the 1980’s tended to be authoritarian, confrontational, sometimes demeaning, and used a style that Miller and Rollnick (2013) described a highly directive. This style of treatment quite often led clients to become defensive, elicit resistance, feel angry or uncomfortable, had poor treatment outcomes, and led to a decrease client motivation (Rollnick & Miller, 2013). MI uses an approach that recognizes ambivalence as normal and that almost every client already recognizes that there is a problem with their
behavior, but at the same time has good reasons to continue with the behavior (Miller, 1983; Miller & Rollnick, 2013). Miller and Rollnick (2013) argue that if a client is demonstrating ambivalence, they are actually one step closer to change because ambivalence is part of the change process, not a sign of resistance as had previously been thought. Unlike some other approached to psychotherapy, MI embraces ambivalence about change and argues against using an authoritarian, highly directive style of counseling (Miller & Rollnick, 2013).

In Miller’s (1983) original article on MI, he describes four key principles of motivation: de-emphasis on labeling, individual responsibility, internal attribution, and cognitive dissonance. De-emphasis on labeling operates under the principle that requiring someone to admit or acknowledge that they are an “alcoholic” was in fact not helpful to many people, and provided more of an obstacle to recovery (Miller, 1983). MI focused more on the problems that the person was having at the time and what needed to be done about them (Miller, 1983). Individual responsibility asserts that it is up to the client to decide what to do about the issue and the clinician’s primary responsibility is to be a resource providing information and perspectives when called upon (Miller, 1983). Internal attribution is based on the idea that if someone sees himself or herself as responsible for making a positive change versus something outside of their control being responsible, the change will be more long lasting (Miller, 1983). Lastly, cognitive dissonance is when a person experiences conflict between their actions and their attitudes, feelings, or beliefs (Miller, 1983). In turn, the conflict leads to an uncomfortable condition in that person which then leads to change in one of these areas, most often action, in order to restore balance (Miller, 1983). These four key principles of motivation set the foundation of MI, are imperative in order to illicit a motivational change, and core in MI’s successful practice (Miller, 1983).
Miller (1983) suggested that in order to elicit a change in behavior and move clients in a direction towards change, four strategic goals are also required in treatment. The four goals are to increase a client’s self-efficacy, to direct dissonance reduction towards a behavior change, to increase self-esteem, and to increase dissonance (Miller, 1983). The four strategic goals are accomplished with the client in therapy sessions through effectively using affirmations, utilizing reflections as a means of reinforcing aspects of the client’s speech, utilizing reflections as a means to frame client speech in a way to not directly reinforce it, building clients’ self-awareness directed towards the increase of dissonance, eliciting self-motivational statements, integrating objective assessment, summarizing client statements, and exploring alternative choices (Miller, 1983). Through the four strategic goals of MI clients are able to increase their belief that they are capable of change and possess the means to do so, and they begin to become aware of the steps needed to make change (Miller, 1983). When clinicians are able to effectively use the four key principles in conjunction with the four strategic goals during the therapy process, client change often occurs (Miller, 1983).

Through continued research and expanded use around the world, MI has experienced an evolution over time. Miller and Rollick (1995) modified and combined the original four principles and four strategic goals and created five general principles. The five general principles are expressing empathy, develop discrepancy, avoid argumentation, roll with resistance, and support self-efficacy (Miller and Rollick, 1995). The same strategies and skills are used to accomplish the five principles as were used to accomplish the four strategic goals (Miller and Rollick, 1991; Miller and Rollick, 1995; Miller, 1983). By effectively utilizing the five modified principles in therapy, MI has been shown to be effective at engaging less motivated clients in
making changes through a collaborative, evocative approach that honors client autonomy (Miller and Rollick, 1995; Miller and Rollick, 1991; Miller, Yahne, & Tonigan, 2003).

While the principles of MI are central to its practice, it is also important to understand how change occurs in individuals. The model utilized to illustrate the process of change in MI is the Transtheoretical Model, also known as the stages of change (Prochaska & DiClemente, 1983; Miller, 1983). The Transtheoretical Model integrates key constructs from other theories of psychotherapy into a comprehensive theory of change that can be applied to a variety of populations, behaviors, and settings (Prochaska & DiClemente, 1983; Prochaska, DiClemente, & Norcross, 1992)

**The Transtheoretical Model**

The clinical method of MI centers on eliciting change in people, the principles of Prochaska and DiClemente’s Transtheoretical Model provide a conceptual model to help in explaining how and why that change occurs (Prochaska & DiClemente, 1983; Miller, 1983; Miller & Rollnick, 2009). The Transtheoretical Model is comprised of several stages that an individual passes through during the process of change, and as people move through the stages, they modify behavior their behavior (Prochaska & DiClemente, 1983; Miller, 1983). The length of time a person remains in each stage varies, but the tasks required to move from one stage to the next are constant (Prochaska & DiClemente, 1983). There are specific processes and principles that function best at each stage of change that support the facilitation of progress, reduce resistance, and prevent relapse (Prochaska & DiClemente, 1983; Miller, 1983). The six stages of the Transtheoretical Model are precontemplation, contemplation, preparation, action, maintenance, and relapse (Prochaka & DiClemente, 1983; Prochaka, DiClemente, & Norcross 1992).
In the precontemplation stage, the first stage of change, people are unaware that there is a problem that needs to be changed (Prochaka & DiClemente, 1983; Prochaka, DiClemente, & Norcross 1992). In the contemplation stage, individuals become aware that there is a problem that needs to be changed, but are not ready to take action. The preparation stage is marked by individuals preparing to make a change within about the next month, this often begins with people making small behavior changes (Prochaka & DiClemente, 1983; Prochaka, DiClemente, & Norcross 1992). As they move on to the action stage, individuals make visible adjustments in their behavior or environment that require commitment in order to overcome their issues (Prochaka & DiClemente, 1983; Prochaka, DiClemente, & Norcross 1992). In the maintenance stage individuals continue to make positive changes and stabilize behavior in order to prevent a relapse, and in the final stage, relapse, individuals return to a previous stage (Prochaka & DiClemente, 1983; Prochaka, DiClemente, & Norcross 1992).

Prochaka, DiClemente, and Norcross (1992) point out that people usually spiral through the stages, not move linearly, and relapse is the norm rather than the exception. The Transtheoretical Model is central to MI and is utilized to understand and explain how people move through the process of change temporally, the tasks required to move from one stage to the next, and keeps in mind that change often occurs non-linearly and people often recycle through the stages (Prochaska & DiClemente, 1983; Miller, 1983).

The Spirit of Motivational Interviewing

As MI’s creators continued to develop and modify MI over time, they eventually added to it an underlying perspective with which one practices MI, the “spirit” (Rollnick & Miller, 1995; Miller and Rollnick, 2013). The spirit of MI is described as having four interrelated elements that each have an experiential and a behavioral component (Rollnick & Miller, 1995;
Miller and Rollnick, 2013). The four elements are partnership, acceptance, compassion, and evocation. A major component of the spirit of MI is forming a collaborative relationship that involves support, genuine interest, and exploration and respect of the client’s autonomy (Carpenter et al., 2012; Miller and Rollnick, 2013). Partnership implies that the clinician is aware of their own goals and aspirations for treatment as well as the client’s, and making sure to avoid providing unsolicited expertise (Miller and Rollnick, 2013).

Miller and Rollnick (2013) describe acceptance as demonstrating that the client has absolute worth and showing a sense of non-judgment, reflecting accurate empathy, having reciprocal honor and respect of each others autonomy, and acknowledging the client’s strengths and efforts (Miller and Rollnick, 2013). The third element of MI spirit that Miller and Rollnick (2013) describe is compassion, to actively promote a client’s wellbeing and give priority to their needs. The final element of MI spirit is evocation, a strength-focused approach to helping people change (Miller and Rollnick, 2013). Evocation seeks to assist clients in discovering their own strengths and resources while using the wisdom they have about themselves to elicit change (Miller and Rollnick, 2013).

The spirit of MI consists of four inter-related elements that communicate compassion, acceptance, partnership, and respect (Miller and Rollnick, 2013). The spirit is the foundation of MI and is described as the “way of being” in every MI conversation. (Rollnick & Miller, 1995; Miller and Rollnick, 2013)

**The Four Processes**

MI also consists of four overlapping processes: engaging, focusing, evoking, and planning (Miller & Rollnick, 2013). MI initially consisted of two phases, but the creators
recognized that approach was not consistent with the principals of MI, as it is sequential and recursive and the processes frequently repeat and overlap (Miller & Rollick, 1991; Miller and Rollnick, 2013). The authors describe the four processes as steps and that “each later process builds upon those that were laid down before and continue to run beneath it as a foundation” (Miller and Rollnick, 2013).

Miller and Rollnick (2013) describe engaging as the process between the two parties in a counseling relationship that involve developing a connection and a working alliance. The process of engaging is the first process of MI and is described as a “prerequisite for everything that follows” (Miller & Rollnick, 2013). The second process in MI is focusing; this involves working collaboratively with the client to develop a direction and focus during the dialogue about change in session (Miller & Rollnick, 2013). The third process in MI is evoking (Miller & Rollnick, 2013). Evoking is described by Miller and Rollnick (2013) as being at the heart of MI and done through drawing out the client’s own motivations to change. The fourth process is planning, this is done when a client becomes ready to change and their language and thought process are more oriented towards developing commitment and creating a particular plan (Miller & Rollnick, 2013). Planning is done collaboratively and involves establishing how a client will proceed and what goals will be focused on in treatment (Miller & Rollnick, 2013).

Miller and Rollnick (2013) point out that each of the processes typically needs to be revisited as clients move through change. As new challenges occur and unforeseen difficulties arise, rethinking of the plan is often required and clients often cycle back though the processes (Miller & Rollnick, 2013). Miller & Rollnick, (1991, 2013) also indicate that in the course of treatment, it is normal for clients’ progress and motivation to vary.
The four processes assist clinicians in using the core MI skills in a purposeful and strategic way that enables them to have a comfortable conversation about change with clients. The processes also help clients resolve their own ambivalence to change by eliciting and reinforcing their own motivation for change behaviors.

**The Core Skills**

In order to effectively use MI, the use of core communication skills is required (Miller & Rollnick, 2013). These communication skills are used throughout the four processes of MI to varying degrees and most are also used in other approaches to counseling, specifically person-centered styles (Miller & Rollnick, 2013). One of the primary information gathering skills that MI uses is asking open-ended questions (Miller and Rollnick, 2013). Open-ended questions are questions that do not have static answers and allow for people to answer in their own words. Another communication skill that MI utilizes is affirming (Miller and Rollnick, 2013). Affirming is a method or highlighting clients’ strengths, efforts, and positive steps (Miller and Rollnick, 2013).

The techniques of reflective listening and summarizing are used as well (Miller and Rollnick, 2013). Miller and Rollnick (2013) describe reflective listening as a fundamental skill that makes a guess about the meaning about what a client has said and is imperative in intensifying understanding in the client-clinician relationship. Summarizing what a client has said during an exchange is a means for the clinician to suggest connections to past and current material and summaries can aid in shifting the conversation onto another topic when appropriate (Miller and Rollnick, 2013). Another important MI skill is informing and advising, this is providing information to a client or offering advice (Miller and Rollnick, 2013). Miller and Rollnick (2013) point out that in MI, informing or advising are only done after asking for and
receiving permission from the client. The core skills of MI are a means of fully facilitating engagement with clients in the process of change, and when used in conjunction with the spirit and the four processes of MI, assist clients in enhancing intrinsic motivation and strengthening commitment for change (Miller & Rollnick, 1991, 2013).

**Effectiveness of MI**

Since its inception over 35 years ago, much has been written about MI. There has been an abundance of research affirming the effectiveness of MI in increasing motivation to change for use with various populations in the area of counseling, and also more recently in other health-related fields (Chiappetta, Stark, Khadejah, Bahnsen, & Mitchell, 2018; Bien, Miller, & Boroughs, 1993; Grenard, Ames, Wiers, Thush, Stacy, & Sussman, 2007; Barnett, Sussman, Smith, Rohrbach, & Spruijt-Metz, 2012; Lundahl et al., 2013). Myriad studies have demonstrated that MI is effective in increasing health-promoting behavior change and decreasing maladaptive behavior (Miller & Rise, 2009). In one of the first studies examining the effectiveness of MI, Miller et al. (1988) applied the Drinker’s Check-up, an MI based intervention, to 42 problems drinkers. They found that after six weeks of treatment, there was a modest, but statistically significant reduction in alcohol consumption; participants reduction in alcohol consumption was also maintained at the 18-month period (Mille et al., 1988).

In a study of clients seeking substance abuse treatment at a Veterans Affair outpatient clinic, Bien et al. (1993) found that those clients receiving an MI interview had statistically significant better outcomes at a three-month follow-up compared to a control group that received an attention-placebo interview. These effects were, however, not sustained at a six-month follow-up and the MI group’s superior effects were no longer superior (Bien et al., 1993). Similarly, Satre, Leibowitz, Sterling, Lu, Travis, and Weisner (2016) examined the efficacy of MI in reducing the
hazardous drinking and drugs use among 307 adults being treated for depression. At six-months, MI was found to reduce consumption of alcohol and cannabis, but with a small effect size (Satre et al., 2016).

D’Amico, Houck, Hunter, Miles, Chan Osilla, and Ewing (2014) found that in a adolescent group setting, change talk, self-expressed speech that argues for change and a key component to MI (Miller & Rollnick, 2012), by the facilitator led to more change talk in the group participants. An increase in overall change talk in the entire group positively affected individual outcomes and was associated with a decrease in intentions to use alcohol, alcohol use, and heavy drinking after three months (D’Amico et al., 2014).

A recent study by Chiappetta, Stark, Mahmoud, Bahnsen, and Mitchell (2018) examined whether MI could increase follow-up pediatric outpatient attendance visits after an inpatient stay. They found that by using MI in the discharge process with adolescents, there was a 10% increase in attendance to follow-up appointments and a 4% decrease in cancellations and no-shows as compared to previous hospital data. In a meta-analysis by Barnett, Sussman, Smith, Rohrbach, and Spruijt-Metz (2012) reviewing 39 MI studies with adolescents, it was determined that 67% of the studies included reported substance use treatment outcomes that were statistically significant.

While there has been significant research demonstrating the effectiveness of MI, other research has contradicted the aforementioned positive outcomes. In a large-scale systemic review of MI reviews, Frost et al. (2018) found that not one of the 155 research reviews included in their analysis reflected high-quality effectiveness for MI. Frost et al. (2018) did find moderate evidence of effectiveness of MI in 27 of the 155 studies, but the remaining 128 research reviews provided low or very low quality of effectiveness according to the criteria used in this research.
Frost et al. (2018) concluded that MI was moderately effective in reducing or stopping many unhealthy behaviors including smoking, drinking, and substance use (Frost et al., 2018). These findings are consistent with DiClemente, Corno, Graydon, Wiprovnick, and Knoblach’s (2017) review of 20 studies involving MI and other motivationally-based interventions that concluded that motivationally-based interventions were effective in reducing drinking behaviors and smoking. While moderately effective with the aforementioned groups, Frost et al. (2018) found inconclusive or low quality evidence for MI’s effectiveness with gambling behaviors and promoting healthy behaviors. DiClement et al.’s (2017) meta-analysis also found minimal support for using MI with people who have gambling related issues.

Research of MI and other motivationally based interventions with cocaine and crack cocaine has shown mixed results with some studies showing the motivational interventions did not have better outcomes than control groups (DiClemente et al., 2017). In a meta-analysis examining research of whether MI reduced illicit drug use in adolescents, LI, Zhu, Tse, Tse, and Wong (2015) determined that MI had no effect, although it may influence adolescents’ intentions to change. In a similar study examining adolescents’ potential for change in brief one-on-one MI interventions, Grenard, Ames, Wiers, Thush, Stacy, and Sussman (2007) determined that MI improved five of nine outcomes, including readiness to change, at a three-month follow up compared to a control group that received treatment as usual. Research by Miller, Yahne, and Tonigan (2003) involving 208 people engaged in substance use treatment found no effect of MI when a single session of MI was added to substance use treatment compared to a group that did not receive MI. Similarly, Mullins, Suarez, Ondersman, and Page (2004) found no effect in a study examining whether MI increased treatment engagement and retention among pregnant female drug users.
Extensive MI research in the field of psychotherapy has shown that MI can be effective at increasing motivation to change in clients and in decreasing many behaviors (Chiappetta, Stark, Khadejah, Bahnsen, & Mitchell, 2018; Bien, Miller, & Boroughs, 1993; Grenard, Ames, Wiers, Thush, Stacy, & Sussman, 2007; Barnett, Sussman, Smith, Rohrbach, & Spruijt-Metz, 2012; Lundahl et al., 2013). There is, however, also a body of research that reflects that MI is minimally effective and may not be effective at all in changing some behaviors (Mullins, Suarez, Ondersman, and Page, 2004; Miller, Yahne, and Tonigan, 2003; Grenard, Ames, Wiers, Thush, Stacy, and Sussman, 2007).

**MI in the Medical Field**

MI research has not only been conducted in the mental health and substance use fields, but also in the field of physical health. Lundahl et al. (2013) conducted a meta-analysis of 48 research studies of MI in medical care settings. They found that overall MI had beneficial effects and produced a statistically significant positive effect on multiple outcome measures such as cholesterol level, blood pressure, HIV viral load, body weight, sedentary behavior, quality of life, and engagement in treatment (Lundahl et al., 2013). Barrett, Begg, O’Halloran, and Kingsley (2018) investigated whether sessions of integrated MI and cognitive behavioral therapy (CBT), a form a psychotherapy that helps people understand how their thoughts influence their emotions and behaviors, changed patient behavior in a program that worked with patients recruited from an ambulatory hospital. They found that patients who engaged in the integrated MI and CBT program had meaningful increases in positive health related behaviors that was maintained at a six month follow-up as compared to a control group that did not receive the integrated treatment (Barrett et al., 2018). Rodriguez-Cristobal et al. (2017) also found that group sessions of MI with overweight patients in a health center resulted in clinically significant weight
loss for those who received MI as compared to those individuals who received the centers’ standard care.

Holt, Milgrom, and Gemmill (2017) explored whether a brief MI intervention by Maternal and Child Health Nurses during a routine assessment of women with symptoms of postnatal depression and anxiety would improve help seeking. Though the results were not statistically significant, the researchers found that the group of women that received the MI intervention had a considerable higher rate of seeking help and they attended more sessions than those in the control group that did not receive MI (Holt et al., 2017).

Contrary the positive effects of MI in the medical field, there is also research evidence that demonstrates that MI is ineffective in the medical field. In an analysis of eight articles examining the effectiveness of MI in employing behavior changes in dietary and physical activity, Hollis, Williams, Clare, and Morgan (2013) found that there was insufficient evidence to conclude MI use leads to behavior changes. In the previously mentioned meta-analysis by Lundahl et al. (2013) that demonstrated several statistically significant outcomes of interest to medical providers, they also found that MI had no statistically significant effect in the areas of safe sex behaviors, heart rate, blood glucose levels, eating disorder behavior, medication adherence, and self-care. Multiple bodies of research within the medical field demonstrate that in many instances MI is effective at facilitating behavior change, but as has been shown in psychotherapy, there also exists research with contradictory results reflecting MI is ineffective at facilitating a change in behavior.
**MI Influencing Attendance**

As mentioned previously, Miller and Rollnick (2013) define MI as a “collaborative conversation style for strengthening a person’s own motivation and commitment to change.” Through the use of MI in the process of strengthening motivation and commitment to change, research has shown a collateral effect of MI in increasing client attendance to treatment sessions (Smith, Hall, Jang, & Arndt, 2018; Carroll et al., 2016; Secades-Villa, Fernandex-Hermida, Arnaez-Montaraz, 2004; Young, Guittierez, & Hagedorn, 2013). Secades-Villa et al. (2004) found heroin users assigned to an MI group had significantly increased attendance rates for treatment compared to a control group six-months after a substance use treatment program was completed.

Another research study compared counseling graduate students working with non-addicted clients who were trained in MI to counseling graduate students who were not trained in MI (Young, Guittierez, & Hagedorn, 2013). Young et al. (2013) found a significant positive effect for the number of sessions clients attended in the MI group and the MI group also missed fewer sessions than the control group. Chiapetta et al. (2018) found that by including MI in the discharge process of adolescents from inpatient psychiatric treatment, a positive clinical impact was shown on attendance rates to follow-up outpatient treatment. Research by Smith et al. (2008) found that higher adherence to MI during adolescent assessments for substance use treatment predicted probabilities of attending the initial treatment session. Using a multisite, randomized clinical trial, research by Carroll et al. (2006) supported Smith et al.’s (2008) research results. Carroll et al. (2006) found that participants assigned to an MI group were significantly more likely to still be enrolled in a substance use program one month later and had attended more sessions.
In contrast, a study by Patterson (2008) investigated whether adding up to five sessions of MI during the initial two-week phase of intensive outpatient treatment increased client retention. Patterson (2008) concluded that MI did not increase the number of days in treatment nor did it influence clients’ completion of treatment. MI may not only be a useful tool in increasing a client’s motivation to change and in decreasing ambivalence, but some research has demonstrated that MI can also increase the rate at which clients attend treatment (Smith et al., 2008; Carroll et al., 2006; Chiapetta et al., 2018; Secades-Villa et al., 2004; Young et al., 2013). These findings have implications for a secondary benefit of MI.

Training in MI

In order to learn any new counseling knowledge, skill, or technique, some type of training is usually required. Training can be done through self-learning by reading a book or manual, attending a formal training or workshop, or by receiving individual or group supervision. Training can also include a combination of these means, or include all of them. Training in MI is no different, however, how much training and what kind of training someone requires in order to attain the necessary knowledge, skill, or techniques to become proficient in MI is unclear.

Miller and Rollnick (2009) assert that mastering MI is not an easy task and it requires that trainees become adroit with a complex set of skills. Another challenge in mastering MI is that it requires trainees to suppress previous counseling practices that are not consistent with MI and impede effective usage (Miller and Rollnick, 2009; Hall, Staiger, Simpson, Best, & Lubman, 2015). A multitude of MI training research reviews reflect that upon completion of an MI training or workshop, trainees typically demonstrate an improvement in basic MI skills (Forsberg, Forsberg, Lindqvist, & Helgason, 2010; Madson, Loignon, Lane, 2009; de Roten,
However, a body of scholarly research has established that a single MI training or workshop is not a sufficient means to learn and then retain the MI skills over time (Madson et al., 2016; Forsberg et al., 2010; Martino et al., 2008; Schwalbe et al., 2011; Decker & Martino, 2013; Barwick, zbennett, Johnson, McGowan, & Moore, 2012). Herschell, Baumann, and Davis (2010) evaluated and compared training methods of 55 evidence-based psychotherapy trainings. They compared the utility of six methods of training: reading material; self-directed training; workshops; workshops supplements that included observation, coaching and feedback; pyramid training; and multi-component training methods (Herschell et al., 2010). The researchers found that compared to other training methods, multi-component training methods, trainings that includes multiple training components in one method, have consistently, over time shown to have positive outcomes (Herschell et al., 2010). None of other five training methods examined in this research showed consistent positive outcomes, although follow-up after a workshop was demonstrated to mitigate the effect of skill loss over time (Herschell et al., 2010).

Consistent with the previously mentioned research, a meta-analysis by Schwalbe et al. (2014) reviewing MI training studies found that it is imperative to include some type of post-training MI follow-up in order to retain MI skills. MI skills learned in an MI training typically erode over time without some form of post-workshop training (Schwalbe et al., 2014; Walters, Matson, Baer, & Ziedonis, 2005). Through their research, Miller and Rose (2009) established that a single workshop or training is not sufficient for most clinicians to proficiently learn MI. Miller and Rose (2009) also recommend progressive individual performance feedback as well as personal coaching. This is consistent with Schwalbe et al.’s (2014) recommendation of ongoing
coaching, feedback, and supervision in order to attain long-term MI skillfulness. Schwalbe et al. (2014) recommended at least three to four follow-up sessions that include performance feedback and coaching. Scholarly research by Hall et al. (2015) supports Schwalbe et al.’s (2014) research and asserts that clinicians rarely maintain MI skill proficiency without post-workshop consultation or supervision. Miller et al. (2004) found that clinicians that participated in a two-day MI clinical workshop showed modest gains in MI proficiency, but these gains were not maintained at a four-month follow-up.

Martino et al. (2008) suggest a two-step process for effectively training clinicians in MI that begins with an initial training or workshop to learn fundamental skills. An initial training or workshop is recommended followed by clinical supervision that includes a feedback, coaching, and review of recorded sessions (Martino et al., 2008). Söderlund, Madson, and Nilsen (2010) also support the idea that MI skills are often not maintained over time without follow-up and they recommend systematic post-training support that includes objective observational tools that evaluate MI fidelity in order to minimize the loss of skills. Supporting the need for evaluation of both fidelity to MI and quality of MI in post-workshop supervision, research has emphasized that self-report by clinicians is not a reliable means to assess MI adherence or skill and that a formal method of assessment is needed (Wain et al., 2006; Decker & Martino, 2013, Martino et al., 2009). Through their research, Hartzler, Baer, Dunn, Rosengren, and Wells (2007) noted that clinicians often give discordant assessments of their MI skills as compared to third party raters. Hartzler et al.’s (2007) research was supported by Miller and Mount (2001) who found that MI supervisees’ self-report of their MI knowledge and skill was rated with considerably higher proficiency than evaluations reflected.
Research by Martino et al. (2011) facilitated a three-step approach to training Veterans Affairs (VA) counselors in MI. All participants in the research study partook in a web-based MI course, and then competency-based supervision afterwards only if they failed to demonstrate adequate MI proficiency as measured through audiotaped client sessions (Martino et al., 2011). Through this research Martino et al. (2011) established that some clinicians do not require follow-up MI training and supervision and are able to demonstrate proficient MI skills after a single workshop or training, whereas other clinicians do require follow-up training and supervision.

While multiple research studies have highlighted the importance of ongoing training after an initial MI training or workshop, there is also evidence that supports the notion that ongoing training may not be necessary to maintain MI proficiency. Research by Martino, Haeseler, Belitsky, Pantalon, and Fortin (2007) observed that medical students were able to increase their use of MI consistent behaviors, knowledge, and confidence after a two-hour training session. A meta-analysis reviewing clinicians’ MI training and MI skill-finding by de Roten, Zimmerman, Ortega, and Despland (2013) found no difference in a group of clinicians trained in MI compared to another group that completed a self-training. de Roten et al. (2013) also found no meaningful differences in MI skills when comparing a group of mental health professionals trained in MI to a group of mental health professionals not trained in MI. Miller et al. (2004) also found that, compared to a self-directed MI learning group, participants in a two-day workshop showed a considerable increases in MI skills and knowledge. Although there does exist some scholarly research that reflects that a single training is sufficient to become proficient in MI, there is also a significant body of research reflects that more than just a single training or workshop is required to master MI and maintain MI skills over time (Schwalbe et al., 2014; Walters et al., 2005; Wain
et al., 2006; Decker & Martino, 2013; Martino et al., 2009; de Roten et al., 2013; Miller et al., 2004).

**Clinical Supervision**

Powell and Brodsky (2004) describe clinical supervision as “a disciplined, tutorial process wherein principles are transformed into practical skills, with four overlapping foci: administrative, evaluative, clinical, and supportive” (p. 11). Bernard and Goodyear (2009) defined clinical supervision as “an intervention provided by a more senior member of a profession to a more junior member or members of that same profession (p. 7). Bernard and Goodyear (2009) further described the supervisor-supervisee relationship as “evaluative and hierarchical, extends over time, and has the simultaneous purpose of enhancing the professional functioning of the more junior person(s); monitoring the quality of professional services offered to the clients that she, he, or they see and serving as a gatekeeper for those who are to enter the particular profession” (p. 7). Loganbill, Hardy, and Delworth (1982) defined clinical supervision as “an intensive, interpersonally focused one-to-one relationship in which one person is designated to facilitate the development of therapeutic competence in the other person” (p. 4). Simply put, the aforementioned descriptions of clinical supervision ultimately describe clinical supervision as a process where an experienced supervisor provides support and guidance through various means to a less experienced supervisee.

The clinical supervisor is responsible for many different tasks during the process of clinical supervision. Falender (2018) described some of these responsibilities as engaging in ongoing assessment of the supervisee, continually monitoring and evaluating supervisees, providing ongoing feedback, and assisting supervisees in being aware of their competence level and working collaboratively to enhance it. Bernard and Goodyear (2014) described the primary
responsibilities of supervisors as fostering supervisees’ development and ensuring client welfare. Krasner, Howard, and Brown (1998) described the responsibilities of the supervisor as monitoring the development of clinical skills and evaluating professional competence. Falender, Shafranske, and Ofek (2014) also highlighted numerous supervisor responsibilities of clinical supervision including empowering the supervisee, enhancing clinical competence, supporting and encouraging the supervisees’ development, forming a supervisory alliance, collaboratively developing goals, and enhancing the supervisees’ reflection on clinical practice. Ultimately, clinical supervision plays an integral role in the field of counseling.

During graduate counselor education and social work programs, fieldwork and corresponding clinical supervision begin to take place (CACREP, 2016; CSWE, 2015). Clinical supervision is a mandatory element of counseling training and essential to the development of counselors, social workers, and psychologists (CACREP, 2018; NASW, 2013; Watkins, 2017). Clinical supervision provides counselors-in-training and counselors with assessment, evaluation, and feedback of their counseling; is built upon a relationship of trust, support, confidentiality, and empathic experiences; and facilitates professional development (APA, 2014; NASW, 2013). Clinical supervision also provides clinical instruction to supervisees, opportunities to learn new skills and techniques, often includes the exchange of ideas, a space to reflect on clinical work, and an opportunity to view issues from multiple perspectives (Reese et al., 2017; Watkins, 2016; NASW, 2013; APA, 2015; ACA, 2014). The American Counseling Association (ACA), the American Psychological Association (APA), and the National Association of Social Workers both find supervision to be important enough to regularly publish their own guidelines for clinical supervision (ACA, 2014; APA, 2015; NASW, 2013). The APA (2015) describes clinical supervision as a distinct area of professional competence that is supported by a framework of
seven domains: supervisory competence; diversity; supervisory relationship; professional assessment, evaluation, and feedback; problems of professional competence; and ethical, legal, and regulatory considerations. These seven domains are the integral parts that make up the important aspects of clinical supervision for psychologists.

Counseling, social work, and psychology, all fields that provide direct counseling to clients, emphasize clinical supervision throughout their training processes and as well as into professional practice (ACA, 2014; CACREP, 2016; APA, 2015; NASW, 2013). In CACREP accredited programs, graduate students are required to complete a semester of practicum, a 100-hour supervised clinical experience that allows them to develop basic counseling skills completed before an internship (CACREP, 2016). During practicum, counseling graduate students are required to participate in one hour of individual or triadic supervision per week while simultaneously participating in one-and-a-half hours of group supervision per week provided by their learning institution (CACREP, 2016). Upon completion of 100 hours of practicum, graduate counseling students are then required to complete 600 hours of internship during which they must also participate in one hour of individual or triadic supervision per week while simultaneously participating in one-and-a-half hours of group supervision per week provided by their learning institution (CACREP, 2016). Graduate Social work students are also required to engage in at least 900 hours of field education with accompanying supervision (CSWE, 2015). In order to obtain a professional counseling license or a license in social work after completing a graduate program, most states require at least another two more years of additional weekly clinical supervision (ACA, 2016; NASW, 2013). Whether one pursues graduate education in counseling or social work, the amount of supervision required to engage in direct counseling work reflects the imperative nature of clinical supervision in both fields.
Types of Supervision

Clinical supervision is typically done on a one-on-one basis or in a group format where a supervisor provides supervision to multiple supervisees at one time. Group supervision is an efficient means to provide supervision to multiple supervisees at one time, it is cost efficient, and research has shown that it can often be clinically rich (Bernard & Goodyear, 1992; Newman & Lovell, 1993). Group supervision allows for participants to support one another through reciprocal feedback and can improve social interest and empathy among participants (Hayes, 1989; Dee & Altekruse, 2000). Group supervision also allows open communication between supervisees and supervisor that promotes clinical growth (Dee & Altekruse, 2000). Hayes (1989) described the benefits of group supervision as being able to assist group members in developing a more accurate sense of themselves and of others through group feedback, and that group members can also improve their sense of empathy and a sense of self. In other research by Kadushin and Harkness (2014), supervisees participating in group supervision reported the advantages of group supervision compared to individual supervision as being able to obtain feedback from both a supervisor and peers and being able to receive training in a wide variety of client issues.

Some common challenges that arise in group supervision are differences in education, developmental level, and emotional needs that may effect cohesion among the group members (Alschuer, Silver, & McArdle, 2015). Issues of conflict, competition, individual issues, and group dynamics can also occur among group members (DiMino & Risler, 2012; Ellis & Douce, 1994). If a group supervision facilitator does not effectively manage these issues and challenges that occur during the course of group supervision, the intimacy and trust of the group can be compromised influencing its effectiveness (Alschuler et al., 2015).
Bernard and Goodyear (2009) describe individual supervision as the “cornerstone of professional development” (p. 218). Individual supervision involves one-on-one supervision between a supervisor and supervisee. All clinicians, at some point in their education and through their professional work, will have had individual supervision. Borders (2016) highlighted supervisor support, direction, and treatment planning as three of the most helpful qualities of individual supervision during masters and doctoral counseling programs. In a study comparing four methods of supervision, Ray and Altekruse (2000) found that a majority of participants had a preference for individual supervision over group supervision, peer supervision, or self-supervision. Supervisees' preference for individual supervision over group supervision is also supported through research by Kadushin and Harkness (2014). When given the option to choose which type of supervision they preferred, people generally preferred individual supervision over group supervision (Kadushin & Harkness, 2014). While there are benefits of group supervision and individual supervision, a majority of people in the aforementioned research preferred individual supervision.

Despite research that reflects many supervisees' preference for individual supervision, in their study comparing assumptions of supervisors and supervisees, Nielsen et al. (2009) found that most supervisees did not prefer nor see the need for individual supervision. Very few supervisees participating in group supervision found the need to also be engaged in individual supervision, and several supervisees reported not seeing the necessity of individual supervision to discuss sensitive issues preferring to handle them in group supervision contrary to the supervisors' preference (Nielsen et al., 2009). In a study with psychotherapy trainees, Gray, Ladany, Walker, and Ancis (2001) described several issues that arose between the supervisor and supervisee in individual supervision. Gray et al. (2001) found that some of the most commonly
occurring issues were counter transference between supervisor and supervisee, supervision needs being left unmet, using a supervision style that did not fit with the supervisee, or a supervisor not being empathic or being dismissive (Gray et al., 2001). There are several issues that commonly arise during the course of individual supervision that when not dealt with effectively, can impede the process of supervision.

Borders et al. (1991) describe the functions of supervising interventions as changing, shaping, or supporting the behavior of the supervisee; assessing the supervisees learning needs; and evaluating the supervisees performance. These aforementioned functions can be done effectively in both individual and in a group setting. Scholarly research by Dee and Atlekruse (2000) found that group supervision by itself and group supervision used in conjunction with individual supervision were equally effective in increasing counselor effectiveness. The equality of effectiveness in group supervision and individual supervision is supported in early research by Lanning (1971) who found no significant difference in the efficacy of individual versus group supervision in counseling students. Individual supervision and group supervision each have advantages and disadvantages, which is used is often a matter of supervisees personal preference or utilizing what is more easily available.

**Supervision Models**

In order for supervisors to provide optimal clinical supervision, a multitude of skills and knowledge are often utilized by the supervisor during the supervision process. Campbell (2009) describes some of the required skills and knowledge as multicultural competence, the ability to manage challenging situations that arise in supervision, crisis intervention skills, knowledge of roles involved in supervision, and knowledge of supervision models. In order to efficiently facilitate the process of acquiring imperative counseling skills and knowledge, clinical
supervision is frequently practiced from one of many specific methods or models (Bernard & Goodyear, 2009). The purpose of practicing clinical supervision through a specific method or model is to provide a framework and structure from which to conceptualize supervision and inform the use of specific supervision skills and techniques (Crutchfield & Borders, 2001; Bernard & Goodyear, 2009). Aten, Strain, and Gillespie (2008) further describe the purpose of a supervision model as to “provides a template for supervisors that informs their understanding of the needs of their supervisees and aids in the selection and integration of supervision modalities to help meet those needs” (p. 2). The various models of supervision are effective tools for guiding supervisors in their use of skills and knowledge during the supervision process.

Bernard and Goodyear (2009) recommend that a supervision method take into account the supervisees’ goals and supervision needs, though often the method reflects the supervisor’s preference. Within individual supervision there are a multitude of supervision models including those grounded in psychotherapy theory, those grounded in developmental models, and those supervision models grounded in social role (Bernard & Goodyear, 2009). Each model of supervision provides different approaches to working with each supervisee, helps guide the supervision experience to facilitate supervisee growth, teach counseling skills and techniques, and evaluate the professional growth of the supervisee (Bornsheuer-Boswell, Polonyi, & Watts, 2013; Bernard & Goodyear, 2009). Some of the more commonly used supervision models are psychodynamic supervision, cognitive-behavioral supervision, systemic supervision, constructivist approaches to supervision, the Adlerian model, the Integrated Development model, the discrimination model and strength-based models of supervision (Bornsheuer-Boswell, 2013; Bernard & Goodyear, 2009; Lemberger & Dollarhide, 2006; Alschuler, Silver, & McArdle,
There are multiple supervision models that can all be used as a lens from which a supervisor can view the supervisee and guide her or him through their counseling work.

**Strengths-Based Supervision**

The strengths-based model of supervision is an amalgamation of several concepts from different supervision approaches (Alschuler et al., 2015). Alschuler et al. (2015) contend that strengths-based supervision is derived from supportive supervision, cooperative supervision, as well as empowerment, resilience, and self-efficacy. Jones and Wade (2015) point out the imperative nature of focusing on strengths and that from an evolutionary perspective, “it is adaptive to give more urgency and weight to the negative than to the positive” (p. 197). By being biased to remember the negative, people were more attuned to potentially negative outcomes and more likely to survive danger or threatening situations (Jones & Wade, 2015; Seligman, 2006). Jones and Wade (2015) also highlight that while focusing on the negative and on mistakes is helpful for survival, it can often be harmful for counseling supervisees in the process of learning and growing. In clinical supervision, focusing on the negative commonly manifests through working out of a deficit perspective that centers on weaknesses and gives little attention to successes (Jones & Wade, 2015). Compared to a deficit model of supervision, strength-based supervision is more able to help supervisees develop resiliency, increase self-efficacy, assist in developing skills and knowledge, and support them in becoming more competent clinicians (Kearns & McArdle, 2012; Alschuler et al., 2015).

Strengths-based supervision focuses on supporting supervisees on what strategies are working with the client in the present, skill development, reflective questioning, and Socratic questioning (Alschuler et al., 2015). Socratic questioning is a form of questioning that is used to analyze assumptions, clarify points, probe reasons and evidence, and examine implications and
viewpoints (Alschuler et al., 2015). Jones and Wade (2015) also highlight the importance of identifying and nurturing supervisees’ strengths in strength-based supervision. Employing strengths in clinical supervision leads supervisees to developing more completely in supervision (Jones-Smith, 2014). Jones and Wade (2015) point out the key tenets of strengths-based supervision approach is assisting supervisees to “recognize and acknowledge, claim ownership, and intentionally practice their strengths.” While identifying strengths is important, Jones and Wade (2015) also point out that in strength-based supervision it is essential to focus on continued strength development. While identifying supervisees’ strengths is important, it is also crucial to focus on the continued development of their strengths (Jones & Wade, 2015). With continued practice, intentional and conscious attention in areas of high aptitude, and through repetition, supervisees’ growth and the transformation of their potential into practical abilities can be utilized into effective counseling practices (Jones & Wade, 2015). Wright and Lopez (2002) highlight the importance of using sensible judgment when using a strengths-based approach to supervision as well as balancing both strengths and weaknesses, and being aware of environmental resources and stressors. Leitz and Rounds (2009) also point out that strengths-based supervision can be effectively used in an individual or a group setting. Strengths-based supervision just doesn’t focus on utilizing supervisees’ strengths, but also on the continued development of strengths (Jones & Wade, 2015).

Another important aspect of strengths-based supervision is the expectation that supervisors set for supervisees. Rosenthal and Jacobson (1968) found that a subordinate’s performance can be influenced by a leader’s expectations for the subordinates. Rosenthal and Jacobson (1968) discovered that the phenomenon of influencing subordinates’ behavior, named
the Pygmalion Effect, occurs when the leader’s expectations for the subordinates unconsciously influences the leader’s behavior toward the subordinates. In strengths-based supervision, the Pygmalion Effect is accomplished through support, consistent encouragement, and reinforcing high expectations (Eden, 1992). White and Locke (2000) point out that the increased performance in subordinates occurs as a result of “increased external expectations being internalized as an increased sense of self-efficacy.” Through the Pygmalion Effect, high expectations are expressed through the leader’s behavior, which in turn provokes high motivation and an increase in effort by subordinates (Eden et al, 2000). A Pygmalion style of leadership creates a supportive interpersonal environment, ascribes external factors as the cause of failures and internal factors as what leads to successes, and this style of leadership motivates strengthening the self-efficacy of subordinates (Eden et al., 2000). Jones and Wade (2015) also highlight the importance in strengths-based supervision of supervisors providing supervisees constructive feedback that is “founded upon a collaborative supervisory relationship; mutually agreed upon goals; based on first-hand data and limited to behaviors that are changeable; phrased in descriptive, nonevaluative language; and deal with specifics and not generalizations (p. 201-202). Through a supervisor’s support, consistent encouragement, and reinforcement of high expectations, supervisees’ beliefs in themselves and their performance can be enhanced (Eden et al, 2000; Jones & Wade, 2015).

Summary

Clients missing appointments in community outpatient settings are a common problem that leads to multiple problems for clients, clinics, and individual clinicians. This quality improvement project suggests that a solution to the issue of client attendance is to train
outpatient clinicians to effectively use MI. When used correctly by trained clinicians, MI has
been demonstrated by scholarly research to increase health-promoting behavior change, decrease
maladaptive behavior, and increase client show rates. There are several approaches to training
clinicians in MI, based on relevant research supporting the idea, this project elected to use a
strengths-based, group supervision format. A one time MI training followed by five months of
strengths-based, group MI supervision was deemed to be an efficient and effective means to train
clinicians and support them in enhancing their MI knowledge, skills, and techniques over time.

There has been significant research reflecting MI’s effectiveness in increasing a client’s
motivation to change behaviors and more recent research reflecting the use of MI in increasing
client show rates. Research has also demonstrated many of the qualities of effective MI training
as well as the multitude of benefits of strengths-based supervision and group supervision.
However, there is no research examining clinician’s use of MI in increasing client show rates
while participating in ongoing strengths-based group supervision. This study is an opportunity to
find an efficient means to decrease the pervasive issue of clients missing appointments through
an effective training method of MI.
CHAPTER 3

Methodology

This is a quantitative study that attempts to monitor whether using motivational interviewing (MI) during individual counseling sessions increases client engagement. Client engagement is measured by client appointment show rates for individual counseling appointments. The clinicians in this study participated in every other week strengths-based group supervision focusing on MI. It has been documented that community outpatient clinics often have low show rates for appointments and low adherence to treatment (Loveland & Driscoll, 2014; LaGanga & Lawrence, 2007). This study investigated whether using MI with clients during individual counseling sessions will increase the client show rates of those clinicians. This study was conducted in two outpatient community counseling clinics.

Participants in this study received an initial six-hour MI training and workshop. Two weeks following the initial training all of the participants took part in one of two every other week strength-based supervision groups. These groups were conducted every other week over the course of five months. A group supervision was held at each of two agency sites every other week. The focus of these groups was to enhance and continue to develop MI skills and techniques, provide an opportunity for peer support, and for participants to receive direct, strengths-based feedback about whether they were effectively applying MI to their counseling.

Research Questions

The central research questions were how does using MI-focused, strength-based group supervision for five months following an initial MI training influence the show rates of clients in a community outpatient site? Were there differences in the show rates of those clinicians who participated in the QI Project compared to clinicians from the same agency who did not
participate? Also, were differences in attendance rates influenced by years of counseling experience? And were differences in attendance rates influenced by whether the clinician held a professional counseling license?

The research hypotheses were that MI-focused, strength-based group supervision for five months following an initial MI training would increase the show rates of clients in a community outpatient site. Additionally, it was hypothesized that attendance rates would be higher for those clinicians who participated in the QI Project compared to clinicians from the same agency who did not participate. Also, the differences in attendance rates between clinicians who participated in the QI Project and those who did not were expected to be positively influenced by the clinician’s years of counseling experience and whether the clinician held a professional counseling license.

**Motivational Interviewing**

Miller (1983) describes MI as an interpersonal process that emphasizes personal responsibility and is based on principles of social psychology, applying processes, cognitive dissonance, and self-efficacy. MI is a person-centered style of communicating with people that highlights constructive ways of talking to people about change (Miller & Rollnick, 2002, 2013). MI is particularly focused on incorporating people’s own values and interests into conversation about change in a guiding style (Miller & Rollnick, 2002, 2013). MI is used in the context of relationships where one person is a helping professional and operates under the premise that “attitudes are not only reflected in but are actively shaped in speech” (Miller & Rollnick, 2002, 2013).

One of the primary focuses in MI is decreasing ambivalence towards change (Miller & Rollnick, 2002, 2013). A meta-analysis by Lawrence et al. (2017) found that MI can decrease
ambivalence and help increase motivation to change in patients regarding health-promoting behaviors. It is thought that through this mechanism clients are more likely to adhere to outpatient treatment.

This study was a quality improvement project that examined two outpatient clinics within the same agency that both provide services to people in their communities with mental health and substance use disorders. Both of these clinics had had what they considered to be historically low client show rates for individual client sessions. The two outpatient clinics are located within a 30-mile radius of a major Eastern United States city. The agency has been tracking show rates through their electronic medical record system since this system was implemented in 2009. The MI project was implemented because the agency was looking for ways that they could improve the quality of their client engagement in order to increase the show rates of client outpatient appointments.

Client Retention

Previous scholarly research has been conducted that indicated that client attendance and adherence to treatment can be increased through the use of MI in counseling sessions (Secades-Villa et al., 2004; Carroll et al., 2006). By integrating MI skills throughout the course of treatment, especially at the beginning stage of treatment, there is evidence that the number of sessions that clients attend may be greater when compared to control groups (Carroll et al., 2006). Bachiller et al. (2015) conducted a two-month follow-up of motivational groups with patients during inpatient drug detoxification. They found that brief MI during admission sessions is associated with positive effects on the likelihood of continuing retention to substance use treatment as well as abstinence from substances (Bachiller et al., 2015). By training clinicians in MI and providing MI focused supervision over the course of this project in order
hone their MI skills, it is thought that these clinician’s client show rates for individual counseling sessions will increase.

**Recruitment**

The quality improvement plan included a multiphase approach that contained the following elements. First, the participating clinicians were recruited. The participating clinicians were seven pre-existing clinicians who were employed through the same community agency from two different sites. All of the clinicians at both sites were presented with the opportunity to participate in this project. It was made clear to all potential participants that their participation was voluntary and choosing not to participate would in no way affect their employment status.

All eligible participants were informed about the project five to six weeks before the initial training during a weekly staff meeting. Those clinicians who were not present at the staff meetings were the announcement was made were informed in person by the MI group facilitator individually. The MI group facilitator explained to the staff that the agency was selecting a maximum of five clinicians from each of the two sites who were willing to commit to this project. The staff were told that the agency would provide free MI training and every other week MI group supervision afterwards.

Participants were informed that the intended purpose of the every other week group supervision was to follow up and continue to enhance the MI skills and techniques taught during the workshop. The participating clients were informed that the every other week group supervision would transpire for a period of six months. Also, if a clinician were interested in participating in the project they were asked to commit to both the initial six-hour MI training and the five-month every other week group supervision. Interested clinicians were informed that their participation in the initial training and workshop and the following group supervision was
voluntary. They were also informed to email the group facilitator their name and why they were interested in participating in the project. Six of the clinicians who participated were employed full-time and one was employed part-time.

Participation in this project was voluntary for two reasons. The first reason participation was voluntary was because it was thought that if the clinicians were offered the opportunity to participate instead of it being a requirement, they would be more invested in the project. The second reason that participation was voluntary was because the clinicians worked under a pay structure where the more hours that they billed for the more they were paid. Participating in this project gave them one fewer hour during the week to meet with clients and generate a billable hour for which they could be paid. The clinicians were not paid to participate in this project. All of the clinicians were already participating in individual administrative and clinical supervision with their direct supervisor one to two times per month. The clinicians were also informed that the MI group facilitator would specifically focus on the development of MI skills and knowledge and supervision would be separate from other supervisions they receive from the agency.

One of the clinicians who volunteered to participate in the project had taken a separate MI training three weeks before the beginning of this project. Another clinician who volunteered to participate in the project was unable to attend the initial training but had taken a MI training by the same facilitator conducting the initial MI training for this project nine months prior. Both clinicians were accepted into the project and attended the first MI every other week group supervision, but not the initial on-site training conducted by an outside facilitator.

**Training**

The second phase of the improvement plan was to conduct a six-hour motivational interviewing training with the selected participants. Those recruited took part in an initial six-
hour MI training and workshop. The MI training and workshop was facilitated by a paid, outside contractor who was not employed by the agency. The training facilitator was a Licensed Professional Counselor in the state of Pennsylvania who had conducted multiple MI workshops in the area for a large accrediting agency over the last ten years and was an adjunct professor at three local universities. The facilitator also had conducted a previous MI training for the agency conducting the QI Project in the past, was financially compensated for facilitating the MI training, but had no affiliation with the agency nor any investment in the success of this project. The participants of the workshop received an overview of MI, learned about the principles of MI and the Transtheoretical Stages of Change, and were taught primary MI techniques. The training was broken down into three hours of didactic learning and three hours of experiential exercises designed to provide opportunities to practice new skills while receiving direct feedback from the facilitator.

**Supervision**

Every other week group supervision was used after the initial MI training to follow up with all of the participants. The objectives of the follow-up MI group supervision was to review what had been taught in the initial training, to teach more MI skills, and to provide continued support in the process of incorporating MI into the attendees clinical work. The group facilitator focused on expanding on the basic MI skills and knowledge that were taught during the initial training and there were no perceived issues with different supervision styles between the facilitators.

Research by Miller and Rose (2009) found that most clinicians needed more than a single MI training workshop to effectively learn MI. Clinicians who participate in MI coaching or supervision after a MI training are able to demonstrate higher rates of MI proficiency as
compared to those who do not participate (Miller & Rose, 2009; de Roten, Zimmerman, Ortega, & Despland, 2013). Schwalbe, Oh, and Zwenben (2014) estimated that within six months after completing an MI workshop participants needed at least three to four supervisory contacts to retain the knowledge and skills from the initial training. Other research by Barwick, Bennett, Johnson, McGowan, and Moore (2012) and Madson, Loignon, and Lane (2009) suggest that in order to support the learning and retain the information from a MI training, post-training MI support and coaching are imperative. Multiple scholarly research studies have demonstrated a reduction in MI skill usage after an initial MI training or workshop within a couple of months if no MI follow-up in conducted (Smith et al., 2012; Moyers et al., 2008; Miller et al., 2004). Hall, Staiger, Simpson, Best, and Lubman (2015) concluded that proficiency in MI can only be achieved with ongoing training and through continual monitoring of MI proficiency.

In this quality improvement project group supervision is primarily being conducted for the purpose of reviewing MI material from the initial training, continual enhancement of MI skills and usage, and developing higher levels of MI proficiency. All participants receiving MI group supervision received one less hour a month of regular clinical supervision from their direct supervisor.

**Group Supervision**

The third phase of this project was to facilitate every other week group supervision. The voluntary supervision was conducted every two weeks for one hour. It was decided to conduct the supervision every other week because it took less time out of the clinicians’ time to see clients as compared to meeting weekly. This minimized time away from seeing clients and meeting monthly revenue productivity numbers enforced by the clinic, which directly impacted the clinicians income.
The first session began two weeks after the initial MI workshop so as to begin the process of every other week MI meetings. Group supervision was conducted at each of the two outpatient sites by the same agency supervisor. The supervisor worked for the agency for seven years and was a Licensed Professional Counselor in the state of Pennsylvania, held a masters degree in counseling, and was enrolled in a doctoral program in counselor education and supervision. The supervisor completed three six-hour MI trainings including the initial MI training for this project. The supervisor had been facilitating group and individual supervision for the previous three years at a local university with graduate counseling students. He had also conducted individual clinical and group supervision at the agency for the previous five years. The group supervision focused on continuing to enhance clinicians MI use and increasing clinical skill in the practice of MI during sessions through the use of MI skill worksheets, role-play activities, MI demonstrations, and MI session video examples.

**Supervision Model**

The facilitator used a strength-based supervision model to facilitate the group supervisions. Strength-based supervision is derived from positive psychology (Jones and Wade, 2015; Edwards, 2017; Ruby, 2017). Positive psychology focuses on peoples positive attributes, strengths, and psychological assets (Kobau et al., 2011; Seligman, Steen, Park, & Peterson, 2005; Ruby, 2017, ). A strengths-based approach to supervision was chosen because it is an approach that assists supervisees in developing resiliency, increasing their self-efficacy, assisting in developing skills and knowledge, and it supports them in becoming more competent clinicians (Kearns & McArdle, 2012; Alschuler et al., 2015). Strengths-based supervision is also an approach to supervision that helps supervisees identify and nurture their strengths, which is
imperative in developing more completely in supervision and retaining knowledge and skills (Jones-Smith, 2014; Jones and Wade, 2015).

Group supervision provides many benefits that individual supervision cannot provide. (Valentino, LeBlanc, & Sellers, 2016; Mastoras & Andrews, 2012; Holmlund, Lindgren, & Athlin, 2010). Some of the benefits are encouraging feedback from multiple perspectives for the same issue, observational learning opportunities, modeling and rehearsing positive and productive discussion, practicing public speaking and presenting, and developing professional repertoires (Valentino, LeBlanc, & Sellers, 2016; Mastoras & Andrews, 2011). Holmlund, Lindgren, & Athlin (2010) also found that group supervision can help in reducing stress, contribute to less burnout, and reduce mental exhaustion when used with nursing students. Driscoll (2007) indicated that group supervision can increase implicit understanding and knowledge of its members through peer to peer feedback from different perspectives and sharing of different opinions. Group supervision is also an efficient way to provide didactic learning opportunities. The agency that conducted the quality improvement project also found group supervision to be more cost and time efficient; it allowed for a supervisor to facilitate the supervision of multiple supervisees at one time. The agency that conducted this project wanted to provide clinical supervision as efficiently as possible. The agency also wanted to minimize the number of hours the supervisor spent facilitating supervision while maximizing the number of supervises being supervised

**Strengths-based supervision**

A strengths-based group supervision model was used for this improvement project. Strengths-based supervision is not a single, clear model of supervision, but a theoretical approach that contains within it several models (Jones & Wade, 2015; Edwards, 2013). All of the
strength-based models contain the central component of identifying and nurturing these strengths (Jones & Wade, 2015).

There are several reasons why strengths-based supervision was chosen as the model for this project. Through the use of a strengths-based model, individuals are able use their own strengths and resources to move towards success in their work (Lopez & Luis, 2009; Saleeby, 2009). Strengths-based supervision is a model that emphasizes supervisee’s expectations, strengths, and confidence in order to have success (Edwards et al., 2017; Cohen, 2004). This model also focuses on competence rather than shortcomings and works with supervisees in a collaborative and inclusive manner in a non-hierarchal way (Cohen, 2004). Strengths-based supervision can also provide a means to guides supervisees towards achieving their goals (Edwards et al., 2017; Cohen, 2004). In this project, supervisees were working collaboratively with the group supervisor towards a common goal of increasing their MI skills and competence. The strengths-based approach used in this project will focus on competence, supervisees strengths, and individual resources.

This approach to supervision was thought to be the best approach to achieving the goals of the project because of its focus on supervisees’ expectations and strengths while providing collaborative support (Edwards et al., 2017; Cohen, 2004; Saleeby, 2009). Based on these aforementioned factors, it was determined that the strength-based approach would most effectively support reviewing MI material from the initial training, the continual enhancement of MI skills and usage, and assist in developing higher levels of MI proficiency.

Research by Worthen & McNeill (1996) found that “good” supervision from supervisees perspective contained a supervisory relationship experienced as empathic, non-judgmental, validating, and normalized struggle. This resulted in supervisees reporting of several positive
outcomes including strengthened confidence and supervisory alliance, refined professional identity, and an expanded ability to conceptualize and execute (Worthen & McNeill, 1996). Strengths-based supervision also focuses on collaborating with supervisees and replaces the deficit and problem remediation focus of supervision practice with a focus on four contemporary strength concepts: narrative, solution focus, resiliency, and positive psychology (Edwards, 2013). The primary goal of this project was to increase MI skills and proficiency. However, facilitating a supervision approach that reinforced the strengthening of confidence, helping supervisees find a professional identity, focusing on solutions, and expanding their ability conceptualize cases supported the primary goal of the project.

**Data Analysis**

A quantitative data software program, SPSS, was used in the analysis of data. The data was first analyzed using a repeated measures ANOVA in order to determine if there was a significant difference in the show rates of the seven participants before they began the project compared to show rates after the project was complete six month later. Next, a two-way repeated measures ANOVA was used to determine if there was a significant difference between the show rates of the seven participants at the end of the project compared to the other clinicians from the same agency who did not participate in the project. Then a multiple regression analysis was used to determine if differences in attendance rates would be influenced by years of counseling experience. Lastly, a multiple regression analysis was used to determine if differences in attendance rates would be influenced by holding a professional license.
Summary

The goal of this chapter was to outline the research methods used to answer the research questions. A discussion of the methodology, procedures, recruitment of participants, models used, and tools outlined the specifics of how the study was conducted. A quantitative approach was used to determine whether the MI intervention impacted client show rates of participants.
CHAPTER 4

Results

A common issue that plagues providers of outpatient psychotherapy and results in a multitude of negative consequences that impact clinics, clinicians, and the clients is missed appointments by clients (DeFife, Conklin, Smith, & Poole, 2010; Lasser, Mintzer, Lambert, Cbral, & Bor, 2015). Missed appointments cause the loss of revenue, reduce providers productivity and clinic efficiency, can increase administrative work, lead to longer waits to get into treatment, cause an increase in the costs of services, negatively impact the quality of care provided, and often lead treatment providers to the premature termination of clients from treatment (Torres et al., 2015; Berrigan & Garfield, 1981; Norris et al., 2014; LeGanga & Lawrence, 2007; Bech, 2005; Molfenter, 2013). Through clinician use of MI in psychotherapy sessions, scholarly research has demonstrated that client retention and attendance rates can be improved (Carroll et al., 2006; Secades-Villa, Fernande-Hermida & Arnaez-Montaraz, 2004; Rollnick & Miller, 1995).

A body of scholarly research has also found that in order for clinicians to successfully use MI and maintain proficiency, more than just a single training is needed (Madson, Schumacher, Baer, & Martino, 2016; Forsberg, Forsberg, Lindquist, & Helgason, 2016; Schwalbe, Oh, & Zweben, 2014; Hall, Staiger, Simpson, Best, & Lubman, 2015). Although previous research has separately examined the effects of MI on psychotherapy attendance and effective training in MI that leads to skill and knowledge retention, none have focused on both constructs simultaneously.

The purpose of this exploratory, pilot quantitative research study was to determine whether using every other week, MI-focused, strength-based group supervision after an initial
MI training can increase client attendance in a community outpatient substance use disorder and mental health treatment facility. This study also explored whether attendance rates were influenced by clinicians years of experience in the counseling field and whether they held a professional counseling license. This study examined archival, de-identified data from a Quality Improvement (QI) Project related to client attendance. Seven participants were chosen voluntarily from two outpatient sites from the same agency for the QI Project, both sites provided mental health and substance use disorder treatment. All clinicians from both sites were offered the opportunity to participate in a free MI training followed by five months of MI-based group supervision, seven agreed to participate. Upon completion of the QI Project, the data from the project was used for this research study. The attendance rates of the six clinicians who opted not to participate in the QI Project were also used in this study. The data provided by the agency for this study was the number of total sessions each clinician had scheduled during the six months before the QI Project began and the number of those sessions that clients attended, and the number of total sessions each clinician had scheduled during the six months immediately following the beginning of the QI Project and the number of those sessions that clients attended. The results of the statistical data and analysis are presented in this chapter.

**Research Questions**

1. How does using MI-focused, strength-based group supervision for five months following an initial MI training influence the attendance rates of clients in a community outpatient site?

2. Are there differences in the attendance rates of clients of those clinicians who participated in the quality improvement project compared to clinicians from the same agency who did not participate?
3. Were differences in attendance rates influenced by years of counseling experience?

4. Were differences in attendance rates influenced by whether the clinician held a professional counseling license?

**Demographic Information**

Participants in the initial QI Project were clinicians working at two sites of a North East, United States outpatient community agency that provided mental health and substance use disorder treatment. The agency provided attendance data for 13 total clinicians, seven of which participated in the QI Project. The demographic information of each clinician the agency shared for the purpose of this study was the number of years each clinician had worked in the counseling field, whether they held a professional license, their gender, and their race/ethnicity. Three of the seven clinicians who participated in the QI Project held a professional counseling license and four of the six clinicians who did not participate in the QI Project held a professional counseling license. The range of years of experience for those clinicians that participated in the QI Project was 1-15 years of experience, and the average number of years of experience was 5.4 years. The group of clinicians who opted not to participate in the QI Project had a range of 7-25 years of experience working in the counseling field with an average of 13 years of experience.

Table 4.1

<table>
<thead>
<tr>
<th>MI Group</th>
<th>License</th>
<th>Years of Experience</th>
<th>Race/Ethnicity</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinician 1</td>
<td>No</td>
<td>1</td>
<td>Caucasian</td>
<td>Female</td>
</tr>
<tr>
<td>Clinician</td>
<td>MI Status</td>
<td>Number</td>
<td>Ethnicity</td>
<td>Gender</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------</td>
<td>--------</td>
<td>-------------</td>
<td>--------</td>
</tr>
<tr>
<td>1</td>
<td>No</td>
<td>1</td>
<td>Chinese/Vietnamese</td>
<td>Female</td>
</tr>
<tr>
<td>2</td>
<td>No</td>
<td>1</td>
<td>Caucasian</td>
<td>Female</td>
</tr>
<tr>
<td>3</td>
<td>No</td>
<td>6</td>
<td>Caucasian</td>
<td>Female</td>
</tr>
<tr>
<td>4</td>
<td>Yes</td>
<td>15</td>
<td>Other</td>
<td>Female</td>
</tr>
<tr>
<td>5</td>
<td>Yes</td>
<td>7</td>
<td>Caucasian</td>
<td>Female</td>
</tr>
<tr>
<td>6</td>
<td>Yes</td>
<td>7</td>
<td>Caucasian</td>
<td>Female</td>
</tr>
<tr>
<td>7</td>
<td>Yes</td>
<td>7</td>
<td>Caucasian</td>
<td>Female</td>
</tr>
<tr>
<td>8</td>
<td>Yes</td>
<td>10</td>
<td>Caucasian</td>
<td>Female</td>
</tr>
<tr>
<td>9</td>
<td>Yes</td>
<td>8</td>
<td>Caucasian</td>
<td>Female</td>
</tr>
<tr>
<td>10</td>
<td>Yes</td>
<td>25</td>
<td>Caucasian</td>
<td>Male</td>
</tr>
<tr>
<td>11</td>
<td>Yes</td>
<td>13</td>
<td>Caucasian</td>
<td>Female</td>
</tr>
<tr>
<td>12</td>
<td>Yes</td>
<td>7</td>
<td>Caucasian</td>
<td>Female</td>
</tr>
</tbody>
</table>

Non-MI Group

<table>
<thead>
<tr>
<th>Clinician</th>
<th>MI Status</th>
<th>Number</th>
<th>Ethnicity</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Yes</td>
<td>15</td>
<td>Other</td>
<td>Female</td>
</tr>
<tr>
<td>2</td>
<td>Yes</td>
<td>10</td>
<td>Caucasian</td>
<td>Female</td>
</tr>
<tr>
<td>3</td>
<td>No</td>
<td>8</td>
<td>Caucasian</td>
<td>Female</td>
</tr>
<tr>
<td>4</td>
<td>No</td>
<td>25</td>
<td>Caucasian</td>
<td>Male</td>
</tr>
<tr>
<td>5</td>
<td>Yes</td>
<td>13</td>
<td>Caucasian</td>
<td>Female</td>
</tr>
<tr>
<td>6</td>
<td>Yes</td>
<td>7</td>
<td>Caucasian</td>
<td>Female</td>
</tr>
</tbody>
</table>

*Number = 13*
Data Analysis

Table 4.2

Test of Normality

<table>
<thead>
<tr>
<th></th>
<th>Kolmogorov-Smirnov</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>df</td>
</tr>
<tr>
<td>Before MI</td>
<td>.251</td>
<td>7</td>
</tr>
<tr>
<td>After MI</td>
<td>.256</td>
<td>7</td>
</tr>
</tbody>
</table>

A one-way repeated measures ANOVA was the most appropriate statistical test for this analysis because this test is used to compare the means of one group over multiple trials. The one-way repeated measures ANOVA was conducted in this study to compare the means of the participants of the QI Project six months before the initial MI training and six months after the project began and to determine whether there was a statistically significant difference in attendance over the course of the 6-month intervention for those clinicians who participated in the QI Project. In order to assess whether the data was normally distributed and to ensure there were no outliers in attendance means, the Shapiro-Wilk test of normality was used. The Shapiro-Wilk test of normality statistical test was used because it is a statistical test that is able to detect outliers in small sample sizes, it showed ($p > .05$), reflecting that with 95% certainly the data does not depart from normal distribution.
The MI intervention did not elicit statistically significant changes in attendance between the two time periods, $F(1,5) = .025, p = .880$, partial $\omega^2 = .004$; attendance slightly decreased from pre-intervention ($M = 59.65, SD = 6.10\%$) to post MI intervention ($M = 59.32, SD = 7.62\%$).

Table 4.3

*Tests of Within-Subjects Effects*

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>1</td>
<td>.384</td>
<td>.025</td>
<td>.880</td>
<td>.004</td>
</tr>
</tbody>
</table>

Table 4.4

*Attendance Rates by Clinician Before and After the QI Project*

<table>
<thead>
<tr>
<th>Clinician</th>
<th>Before MI</th>
<th>After MI</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinician 1</td>
<td>53.41%</td>
<td>50.95%</td>
<td>-2.46%</td>
</tr>
<tr>
<td>Clinician 2</td>
<td>68.81%</td>
<td>65.10%</td>
<td>-3.71%</td>
</tr>
<tr>
<td>Clinician 3</td>
<td>55.43%</td>
<td>54.74%</td>
<td>-0.69%</td>
</tr>
<tr>
<td>Clinician 4</td>
<td>58.12%</td>
<td>55.65%</td>
<td>-2.47%</td>
</tr>
<tr>
<td>Clinician 5</td>
<td>55.25%</td>
<td>65.69%</td>
<td>10.44%</td>
</tr>
<tr>
<td>Clinician 6</td>
<td>67.45%</td>
<td>70.50%</td>
<td>3.05%</td>
</tr>
</tbody>
</table>
Clinician 7 | 59.09% | 52.61% | -6.48
Mean | 59.65% | 59.32% | -0.33%

A post hoc Bonferroni test was used because it can detect a Type I error, the rejection of a true null hypothesis which would show a significant result occurred by pure chance. Post hoc analysis with a Bonferroni adjustment revealed that attendance did not significantly decrease from pre-intervention from post-intervention ($M = -0.331\%$, 95% CI [-4.82, 5.48], $p = .880$). There was also not a statistically significant difference between means.

For this statistical analysis a two-way repeated measures ANOVA was used; this statistical test can establish if there are differences in mean attendance rate changes from pre-test to post-test between the group that participated in the QI Project and the group that did not participate. The data from one of the seven participants in the QI Project was eliminated from this analysis because, relative to the rest of the participants including those who did not participate in the QI Project, the number of sessions conducted in the time period before the QI Project was an outlier (though the mean attendance rate of this clinician was not an outlier in the previous analysis, because it was not as discrepant when compared only to the QI Project participants). Notably, that clinician was hired shortly before the project began, had fewer background sessions, and had conducted 25 total sessions in the time period before the QI Project; the mean number of sessions for all clinicians for both time periods was 634. In order to assess that the data was normally distributed and to ensure there were no outliers in attendance means, the Shapiro-Wilk test of normality was used. Analysis of the studentized residuals showed that attendance rates were normally distributed, as assessed by Shapiro-Wilk test of
normality of the studentized residuals \((p > .05)\), and there were no outliers, as assessed by examination of studentized residuals for values greater than \(\pm 3\).

Table 4.5

*Test of Normality*

<table>
<thead>
<tr>
<th></th>
<th>Kolmogorov-Smirnov</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>df</td>
</tr>
<tr>
<td>MI Before</td>
<td>.263</td>
<td>6</td>
</tr>
<tr>
<td>MI After</td>
<td>.233</td>
<td>6</td>
</tr>
<tr>
<td>NonMI Before</td>
<td>.209</td>
<td>6</td>
</tr>
<tr>
<td>NonMI After</td>
<td>.263</td>
<td>6</td>
</tr>
</tbody>
</table>

The results of the two-way repeated measures ANOVA revealed that there was no significant interaction of MI on attendance between the group that participated in the QI Project and the group that did not participate one the project \(F(1, 5) = 1.19, p = .325, \eta^2 = .192\).

Table 4.6

*Tests of Within-Subjects Effects*

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time*Treatment</td>
<td>1</td>
<td>10.71</td>
<td>1.19</td>
<td>.325</td>
<td>.192</td>
</tr>
</tbody>
</table>
Table 4.7

Tests of Within-Subjects Effects

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>1</td>
<td>1.50</td>
<td>.017</td>
<td>.903</td>
<td>.003</td>
</tr>
<tr>
<td>Time</td>
<td>1</td>
<td>2.48</td>
<td>.341</td>
<td>.585</td>
<td>.064</td>
</tr>
</tbody>
</table>

Simple main effects were run to determine if there were differences in attendance rates between the two groups irrespective of the two time periods (before the QI Project and after the QI Project) and in regard to trial (MI and non-MI). The main effect of treatment did not show a statistically significant difference in attendance rates between trials (MI and non-MI) $F(1,5) = .017, p = .903$. Simple main effects were also run to determine if there were differences in attendance rates between the two groups irrespective of trial (MI and non-MI) and in regard to time period (before the QI Project and after the QI Project). The main effect of time did not show a statistically significant difference in attendance between trials $F(1,5) = .341, p = .585$.

There was a decrease in show rates for the non-MI group ($M = 61.58, SD = 4.53$) pre-intervention to the end of the project ($M = 59.61, SD = 3.37$), though this difference was not statistically significant ($\Delta M = -1.97\%, 95\% CI [56.07, 63.14], p = .063$. There were no outliers and the data was normally distributed, as assessed by Shapiro-Wilk test of normality ($p > .05$). Attendance rates were not statistically different in the MI group ($M = 59.75, SD = 6.68$) compared the non-MI group ($M = 61.58, SD = 4.53$) at the beginning of the project $F(1,5) = .22, p = .661$, partial $\omega_p^2 = .042$. Attendance rates were also not statistically different in the MI group

67
(M = 60.44, SD = 7.69) compared the non-MI group (M = 59.61, SD = 3.37) at the end of the project F (1,5) = .04, p = .850, partial $\omega^2 = .008$.

Table 4.8

*Tests of Within-Subjects Effects*

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>BeforeMI</td>
<td>1</td>
<td>10.10</td>
<td>.217</td>
<td>.661</td>
<td>.042</td>
</tr>
<tr>
<td>AfterMI</td>
<td>1</td>
<td>2.1</td>
<td>.40</td>
<td>.850</td>
<td>.008</td>
</tr>
</tbody>
</table>

Table 4.9

*Client Attendance Rates by Clinician*

<table>
<thead>
<tr>
<th></th>
<th>Before MI</th>
<th>After MI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-MI Group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinician 1</td>
<td>67.68%</td>
<td>62.76%</td>
</tr>
<tr>
<td>Clinician 2</td>
<td>63.52%</td>
<td>60.83%</td>
</tr>
<tr>
<td>Clinician 3</td>
<td>63.66%</td>
<td>63.52%</td>
</tr>
<tr>
<td>Clinician 4</td>
<td>56.92%</td>
<td>57.05%</td>
</tr>
</tbody>
</table>
Clinician 5  62.06%  58.57%  -3.49%
Clinician 6  55.64%  54.88%  -0.76%
Mean  61.58%  59.60%  -1.98%

Table 4.10
Attendance Rate Comparisons

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>MI Before</td>
<td>59.75%</td>
<td>6.68%</td>
<td>6</td>
</tr>
<tr>
<td>MI After</td>
<td>60.44%</td>
<td>7.69%</td>
<td>6</td>
</tr>
<tr>
<td>NonMI Before</td>
<td>61.58%</td>
<td>4.53%</td>
<td>6</td>
</tr>
<tr>
<td>NonMI After</td>
<td>59.60%</td>
<td>3.37%</td>
<td>6</td>
</tr>
</tbody>
</table>

To address Research Question #3, whether years of experience differentially influenced attendance rates between clinicians that participated in the QI Project and those who did not, a multiple regression analysis was used. A multiple regression was used to determine whether years of experience acted as a moderator variable that influenced the differences in attendance of clinicians that participated in the QI Project compared to those who did not. In this analysis, the dependent variable was the difference score between attendance rates before after the treatment,
with the independent variables of participation in the QI Project, clinician years of experience, and the interaction term of these two variables. The interaction term was created by first centering and then multiplying the two variables together; a significant interaction effect would reveal whether there was significant moderation (see Baron & Kenny, 1986). The results showed the overall model explained 7.1% of the variance (adjusted $R^2 = .071$%), a small effect size $F(2,9) = .757, p = .498$). The interaction effect was not statistically significant, showing that years of experience was not a significant moderator.

To address Research Question #4, whether being professionally licensed differentially influenced attendance rates between clinicians that participated in the QI Project and those who did not, a multiple regression analysis was again used. Here, a multiple regression was used to determine whether being professionally licensed acted as a moderator variable that influenced the differences in attendance of clinicians that participated in the QI Project compared to those who did not. In this analysis, the dependent variable was the difference score between attendance rates before after the treatment, with the independent variables of participation in the QI Project, being professionally licensed, and the interaction term of these two variables. As in the previous moderation analysis, the interaction term was created by first centering and then multiplying the two variables together; a significant interaction effect would reveal whether there was significant moderation (see Baron & Kenny, 1986). The results showed the overall model explained 16.8% of the variance (adjusted $R^2 = .168$%), a small effect size $F(2,9) = 1.739, p = .106$). The interaction effect was not statistically significant, showing that years of experience was not a significant moderator.
Research Hypothesis

The following research hypothesis were analyzed in this study:

Research hypothesis 1. MI-focused, strength-based group supervision for five months following an initial MI training is predictive of the attendance rates of clients in a community outpatient site.

Research hypothesis 2. There would be differences in the attendance rates of clients of those clinicians who participated in the quality improvement project compared to clinicians from the same agency who did not participate.

Research hypothesis 3. Differences in attendance rates would be influenced by years of counseling experience.

Research hypothesis 4. Differences in attendance rates would be influenced by years of counseling experience.

Chapter Summary

This chapter provided a description of outpatient clinicians' client attendance rates from a QI Project before and after a MI training intervention for clinicians from a community agency that provided mental health and substance use disorder treatment. The study examined the attendance rates of the clinicians that participated in the QI Project as well the attendance rates of clinicians from the agency that did not participate in the QI Project. The agency that conducted the QI Project provided client attendance rates, whether the clinician held a professional counseling license, the years of experience in the field of counseling, gender, and race/ethnicity. The data revealed that there was no statistically significant difference between the attendance rates of the group that participated in the QI Project before the intervention compared to after the intervention, leading to the rejection of hypothesis one. The data furthermore revealed that there
was no statistically significant difference in the changes in attendance rates for the clinicians that participated in the QI Project as compared to the clinicians who did not participate, leading to the rejection of hypothesis two. The data also revealed that there was no statistically significant effect of whether clinicians held a professional license or in their years of experience in the counseling field with regard to group differences in their client attendance rates, leading to the rejection of hypotheses three and four. Though all four hypotheses were rejected, the QI Project used an extremely small sample size that limited the statistical power to detect effects and hinders generalizability; this will be discussed in detail in chapter 5.
CHAPTER 5

Discussion and Results

Clients missing psychotherapy appointments is a common issue in outpatient psychotherapy that is especially prevalent in substance use disorder treatment (DeFife et al., 2010; Secades-Villa et al., 2004, Carroll et al., 2006; Loveland & Driscoll, 2014). When clients miss psychotherapy appointments it can often lead to a multitude of issues that affect the clinics providing services, the clients receiving services, as well as the clinicians delivering treatment (Curran, Stecker, Xiaotong, & Booth, 2009; LeGanga & Lawrence, 2007; Leichsenring & Rabung, 2008, Edlunnd et al., 2002).

A style of counseling, Motivational Interviewing (MI), has been shown, through scholarly research, to mitigate the issue of clients missing appointments (DeFife et al., 2010; Secades-Villa et al., 2004; Lundaahl et al., 2013). Through clinicians' use of MI in psychotherapy sessions, research has demonstrated that MI can strengthen client motivation and commitment to change, a collateral effect of which is increasing client attendance to treatment sessions (Smith, Hall, Jang, & Arndt, 2018; Carroll et al., 2016; Secades-Villa, Fernandex-Hermida, Arnaez-Montaraz, 2004; Young, Guitierrez, & Hagedorn, 2013). The purpose of this study was to determine whether using every other week, MI-focused, combined with strengths-based group supervision after an initial MI training can increase client attendance in a community outpatient substance use disorder and mental health treatment facility.

Summary of the Study

This study examined data from a Quality Improvement Project to conduct an exploratory, pilot quantitative research study investigating whether every other week, MI-focused, strengths-based group supervision following an initial MI training can increase outpatient therapist's client
attendance rates. This study sought to explore whether clients’ attendance rates were influenced by the MI training and supervision by comparing the attendance rates of those clinicians who participated in the QI Project six months before the project began to six months after it started. This study compared the attendance rates of the clinicians who participated in the QI Project to the attendance rates of clinicians from the same agency who did not participate in the project, and also delved into whether clinicians’ years of experience in the counseling field and whether they held a professional counseling license played a role in whether participation in the QI Project affected their client attendance rates. Participants in the QI Project were volunteers from a community agency that provided outpatient mental health and substance use disorder treatment and participating in the project was a function of their job.

Major Findings

Research Question #1

The first research question investigated whether every other week, MI-focused, strengths-based group supervision following an initial MI training increased therapist’s client attendance rates. The research hypothesis was that clinicians’ participation in MI-focused, strength-based group supervision for five months following an initial MI training would lead to attendance rates of clients in a community outpatient site. Results indicated that the MI intervention in the QI Project did not increase clinicians’ client attendance rates. The clinicians’ show rates after the QI Project slightly decreased compared to the attendance rates before the project began, albeit it was not a statistically significant change. The results of a one-way repeated measure ANOVA showed that the MI intervention did not elicit statistically significant changes in attendance between the time period before the QI Project and the time after the QI Project, and that attendance slightly decreased across the two time periods. These findings were inconsistent with
research by Carroll et al. (2006), Secades-Villa et al., (2004), and Dean et al. (2016) who found that clinicians’ use of MI increased the likelihood that clients’ attend treatment sessions. Not finding a statistically significant change in attendance may have been the result of the small sample size used in the QI Project making the results of the pilot study difficult to generalize. This will be explained further in the limitations section.

These results reflect the need for continuing research into both MI being utilized to positively influence client attendance rates, and what the most effective means of training mental health and substance use disorder clinicians in MI in order to maintain proficient use of skills and knowledge over time. While attendance rates decreased .33% between time periods, the agency has consistently experienced historical trends of a decline in client attendance during the time period of July to December. The MI intervention may have mitigated the seasonal decline in attendance during that period of time. Future research could conduct a similar study during a different time of the year or across the whole year taking more into account season changes.

Another factor that may have contributed to client attendance rates during the period of the QI Project was structural changes going on within the organization contemporaneously. The organization that facilitated the QI Project merged with another organization the year before the project began and major changes in financial compensation to clinicians were announced halfway through the project that primarily impacted professionally licensed and experienced clinicians. The changes led to a decrease in morale in both offices of the QI Project as well as several of the participating clinicians’ motivation to continue in the project. Strengths-based, group supervision was planned to transpire for six months. However, while client attendance rates were still included for all six months, strengths-based group supervision was ended after five months because the clinicians from the site with three clinicians, all of whom were more
experienced and professionally licensed, could no longer commit to every other week supervision and had lost their motivation to participate. The sixth month of the project without group supervision was still included in the data for the QI Project because the effect of the initial MI training and five months of the strengths-based, group supervision was still thought to be active and the data from the final month could be a valuable reflection of the project.

**Research Question #2**

The second research question explored whether there were differences in the attendance rates of clients of those clinicians who participated in the quality improvement project compared to clinicians from the same agency who did not participate. The research hypothesis was that the attendance rates of clients of those clinicians who participated in the quality improvement project would be higher compared to clinicians from the same agency who did not participate in the QI Project. Results indicated that there was no statistically significant difference in the attendance rates of the group of clinicians that participated in the QI Project as compared to the group of clinicians who did not. The results were contrary to research by Secades-Villa et al. (2004) who found clients with a substance use disorder diagnosis in a MI treatment group had significantly higher attendance rates for treatment compared to a control group six-months after a substance use treatment program was completed. Similarly, Smith et al. (2008) found that the probability of adolescents attending an initial treatment session could be predicted by a higher clinician adherence to MI during assessments for substance use treatment. The clients from the QI Project had a different makeup than the makeup of the clients from the aforementioned research studies, which may have impacted the results. Both sites in the QI Project served clients who had mental health and substance use disorder diagnoses and also served clients from a broad age range.
Research Question #3

The third research question investigated whether clinicians’ years of experience differentially influenced attendance rates between clinicians that participated in the QI Project and those who did not. The research hypothesis was that years of experience would differentially influence attendance rates between clinicians that participated in the QI Project and those who did not. Results indicated that years of experience did not statistically significantly influence differences in attendance rates between clinicians from the two groups.

This null result could have been due to clinicians that participated in the QI project having difficulty in abandoning their previous approach to counseling which may have been contradictory to MI. The lack of compatibility with a previous approach to counseling would not account for the clinicians who did not participate in the project with more years of experience not having higher attendance rates. The more experienced clinicians may have also been negatively influenced by the aforementioned changes within the agency as they were the ones most directly impacted, and the change in morale and motivation to participate in the QI Project could have impacted their client engagement.

Research Question #4

The fourth research question investigated whether holding a professional license differentially influenced attendance rates between clinicians that participated in the QI Project and those who did not. The research hypothesis was that holding a professional license would differentially influence attendance rates between clinicians that participated in the QI Project and those who did not. Results indicated that holding a professional license did not statistically significantly influence differences in attendance rates between clinicians from the two groups.
In order to obtain a professional counseling license in Pennsylvania, a minimum of two years (3000 hours) of experience in counseling upon graduation from a masters counseling program is required. Additionally, clinicians must also have a minimum of one hour of clinical supervision by a licensed professional counselor for each forty hours of practice, pass the Nation Counseling Examination (NCE) or other board approved national competency exam, and provide recommendation from other professionals who will attest to the moral character and ethical behavior of the applicant in order to obtain licensure. The aforementioned criteria reflect the stringent qualifications to attain professional counseling licensure as well as the overlap between the previous moderation analysis and this one. For someone to receive their professional license, it is also more likely that they have more counseling experience compared to someone that does not.

The licensed clinicians in the study generally had more years of experience with the exception of one clinician who was not licensed and had 25 years of experience, the most experience in the counseling field of all 13 clinicians in the study. The study had a small sample size with limited statistical power; a higher sample size may have produced a statistically significant effect of holding a professional license. To better understand the potential unique effects of being licensed above and beyond those that come from having greater counseling experience, future research would benefit from seeking out more experienced non-licensed participants.

It was surprising that there was no statistically significant difference in attendance rates between licensed and non-licensed clinicians. It is often assumed that licensure is a hallmark of competency as licensure is regulated and regimented. It would not be a leap to think that competency might equate with greater success rates in keeping clients engaged, interested, and
therefore more invested in attending sessions. If the results of this study could be generalized to a larger population, it would suggest that there is no real difference between the engagement (as measured by session attendance) of clients who see a licensed versus non-licensed clinician. One hypothesis regarding this lack of difference could actually involve the provision of clinical supervision. In this study, clinicians who participated in the QI project received additional strengths-based supervision as compared to their non-participating peers. Outside of such project, once a counselor becomes licensed there is no requirement for clinical supervision. New clinicians, who are working toward licensure often receive the maximum of two hours of clinical supervision per week, comonly in addition to separate, administrative supervision. There may be some sort of influence related to supervision of a clinical nature that is somehow translated into attendance rates or at least counselor ability to develop counseling alliance with clients. This is an area for further study.

**Limitations**

This study had several limitations in regard to the QI Project. First, the sample size in the project was small consisting of seven members, while the comparison group had only six members which limited the statistical power and made it is difficult to make generalizable inferences about the results. One of the clinicians in the QI Project was hired shortly before the Project began and had 25 total sessions in the time period before the QI Project and 344 afterwards. The average number of sessions in both time periods for all clinicians was 634 sessions. Twenty-five sessions before the QI Project may not have been a large enough sample size to accurately reflect that clinician’s attendance rates in the period before the project began. Also, the sample selection was made up of volunteers and was not random, nor was assignment
to treatment versus control group. These methods of sample selection and group assignment do not lend themselves to sample representativeness or generalizability.

A factor that may have played a role in the small number of volunteers is that participation in the training and supervision required that clinicians take time away from meeting with clients. The agency that conducted the QI Project assigned productivity standards to clinicians that required each clinician to produce a minimum number of billable hours in a month. The clinicians were also financially rewarded for exceeding their productivity expectations. Participating in this project took away from some of the clinician’s billable hours and therefore their financial compensation. Participants were not informed before or during the project about the possible benefit of incorporating MI into their counseling and that it may increase client attendance.

There was also a wide variance in number of years practicing counseling between the participants. One clinician was in the final semester of graduate school and was working part time during the time she or he participated in the first part of the QI Project, two clinicians had less than two years experience, one had six years experience, three had seven years experience, and one had 15 years experience. The clinicians who worked in the counseling field longer may have been more grounded in their previous approach to counseling and may have had a more difficult time abandoning their MI inconsistent habits and adopting a new MI approach to engaging clients.

Two of the clinicians that participated in the QI Project did not participate in the initial MI training that preceded the strengths-based MI group supervision because they had taken another MI training. The same facilitator who conducted the initial MI training in the QI Project conducted the training for one of those two clinicians nine months prior. The other clinician who
volunteered to participate in the project had taken another MI training. It is likely that the clinician who had their MI training through a different trainer received a different MI training and the information provided varied, as there is no standard initial MI training protocol. The clinician who did have the same trainer participated in the training nine months prior to the beginning of the project and may have not retained much of the information provided over the course of time between the training and the beginning of supervision.

Another limitation of this study was that one of the two sites had considerably more clients who had a mental health diagnosis, whereas the other site had considerably more clients who had a substance use disorder (SUD) diagnosis. A client’s primary diagnosis may have been a factor in attendance rates and the diagnosis of each client was not able to be captured for each clinician. Several of the previous research studies cited that supported the use of MI to increase attendance rates focused on clients in substance use disorder treatment, but many clients in this study had a primary mental health diagnosis. MI may not be as effective with clients who have a primary mental health diagnosis and it was not possible to glean that information. Also, many of the clients who had a SUD diagnosis compared to those with a mental health diagnosis were externally motivated to attend treatment. A considerable number of clients with a SUD were in treatment as part of a requirement for probation, parole, or child protective services, which was not the case for those clients in treatment with a mental health diagnosis. External motivation may have influenced the attendance of those clients.

Another limitation is that fidelity of MI was not measured. The initial design of the QI Project included the clinicians doing audio recording of their sessions at a minimum of one time per month in order to be recorded and coded using the Motivation Interviewing Treatment Integrity (MITI) tool, which is used to measure fidelity to MI. The three professionally licensed
Clinicians were not able to provide recordings of any of their sessions. The four non-licensed clinicians were able to get audio recordings of their sessions, but they each provided a different number of recorded sessions and the recordings were evenly distributed over time. One clinician recorded a total of five sessions, but the first recording was three months into the project and the last three recording were all in the final month. Another clinician was only able to get four of the requested six recordings. Therefore, fidelity to MI was not measured and how well clinicians used MI over the six months that attendance was recorded was not captured. Clinician’s use of MI was an important aspect of this project and how well or how poorly each clinician used MI during the six months of the project was not captured making it difficult to report clinicians’ ability to implement MI into their counseling sessions. The group facilitator also received feedback during the over other week supervision from some of the clinicians about some of the challenges they had incorporating MI into their counseling. Without the use of a MI fidelity tool it was impossible to measure effective MI use. Research by Hartzler et al.’s (2007) and Miller and Mount (2001) reflects the importance of using a fidelity tool because self-report of MI use is most often inaccurate.

Another limitation of the MI tool was that it was time consuming. The group facilitator intended to code at least one session per month for all seven participants. The MITI tool required that the person doing the coding listen to a random 20-minute segment of a recorded counseling session two times. The group facilitator who planned on doing the coding was not able to be formally trained in using the MITI and self-learning was the only option available. Listening to at least one 20-minute audio recording for each clinician every month, a minimum of 840 total minutes of recorded audio, two times and coding it would have also been very time consuming.
Lastly, the facilitator of the every other week strengths-based group supervision had no formal training in conducting strengths-based supervision. Much of the group facilitator’s knowledge of strengths-based supervision was informed through reading a book on strengths-based supervision (Jones & Wade, 2015). Strengths-based supervision is also a construct with no specific skills to be measured, therefore making it impossible to reflect how well or poorly the facilitator used strength-based supervision during the project. A future study could also monitor the fidelity of strengths-based supervision of the group facilitator to determine how well it is being utilized, which could be a factor in how well MI knowledge and skills were retained. Also, the group facilitator was male and all of the participants in the MI Project were female. The gender difference may have been a factor in supervision.

Implications for the Counseling Field

There are a multitude of challenges for clinicians working in the field of counseling. The myriad clients who seek counseling services bring with them into session myriad different issues. It is the job of clinicians to help support and guide clients through these issues, but if clients cannot make it to a session there is little that can be done. MI offers a means to assist clients in resolving ambivalence and in finding a motivation to change, as well as finding the motivation to attend therapy sessions. As mentioned throughout this study, when clients do not show up for scheduled appointments it impacts the clients, clinics providing services, and the clinicians. The opioid epidemic has brought the United States to a moral imperative to help people struggling with addiction in any and every way possible. The more frequently clients attend therapy sessions the more likely it is that they can receive the help they need. The use of MI in counseling sessions has the potential offer a way to assist in that process and may help save lives.
Organizations that provide counseling services can potentially benefit from this research. In the time of managed care it is essential that organizations who provide counseling services maximize their efficiency, and a big part of maximizing efficiency is doing everything possible to increase client attendance. When clients don't show up for their appointments, organizations cannot get paid. By providing training in MI, while it takes away from some productivity time in the short-term, MI training also may have long-term benefit of increasing client attendance, therefore benefitting the organizations and the employees that work in them. Furthermore, if MI was able to mitigate lower attendance rates during the seasonal decline, MI could be implemented by agencies before the decline to reduce missed appointments.

Clinicians often learn through their graduate education and in the process of their clinical work that it is solely the responsibility of the client to make it to their therapy sessions. If clients are not present, therapy cannot be done. In most cases clinicians cannot go to their clients to do therapy and the burden of responsibility to attend sessions falls onto the client. It is highly unlikely that a client is seeking counseling services because everything in their life is going well. It is well known that people who have mental health issues are more likely to have physical health issues (National Institute of Mental Health). People with substance use disorder are also more likely to have mental health and physical health issues compared to those without a substance use disorder (National Institute on Drug Abuse). Mental health and substance use disorders bare an enormous cost to society. If there is a means to possibly help the people that clinicians serve attend their appointments more frequently and receive the assistance they need to get well, it is the responsibility of clinicians to utilize it to the best of their ability.

By utilizing MI in counseling sessions and potentially increasing client attendance rates, clinics may be able to increase clinician pay though the increase in revenue that would be
generated. An increase in clinician revenue may have the collateral affect of decreasing work stress and increasing morale. This is especially true for clinicians working in private practice as they are generally paid as contract employees and their revenue is entirely based on client attendance; if a client does not show up they do not get paid.

Another benefit of the QI Project is the benefit of participating in strengths-based supervision. Strength-based supervision has been shown to help supervisees to increase self-efficacy, develop resiliency, assist them in developing counseling skills and knowledge, and support clinicians in becoming more competent (Kearns & McArdle, 2012; Alschuler et al., 2015). Strengths-based supervision also helps supervisees identify and nurture their strengths, and research has shown that employing strengths in clinical supervision leads supervisees to developing more completely (Jones & Wade, 2015; Jones-Smith, 2014). By clinicians just engaging in regular strengths-based supervision they may benefit in a multitude of ways. Future research may consider having the facilitator participate in a formal strength-based supervision training which could assist him or her in enhancing their knowledge and skills in strengths-based supervision.

**Implications for Future Research**

Several areas for future research arose during this study. While this QI Project was a pilot program, if it were to be put into regular practice at an organization several modifications could be made to possibly increase effectiveness of MI skill retention. First, the use of a fidelity tool to provide regular feedback to clinicians that reflects how well they are using MI is imperative. The QI Project intended to use the Motivation Interviewing Treatment Integrity (MITI) tool, but the participating clinicians were not able to provide enough consistent audio recordings of sessions to accurately reflect MI skills and knowledge usage during sessions or MI skill gains over time.
A future MI knowledge and skill building program would need to convey the importance of measuring clinician MI skill use in session through a fidelity tool as part of the learning process. The importance of feedback through audio recordings is consistent with research by Martino et al. (2008) and Söderlund et al. (2010) who report clinician difficulty in maintaining MI skill proficiency without post-workshop follow-up that includes a review of recorded sessions. This project requested the clinicians provide at least one audio recording per month, a future program may consider increasing the frequency of audio recordings to at least one recording per week. Requesting one recording per week would increase the likelihood that clinicians provide enough recordings consistently over time to be for MI use. It is also suggested in a future MI knowledge and skill building program to consider making the audio recordings a requirement of participating. The group facilitator of the QI Project asked the participating clinicians to provide recordings, but they were not required. The frequency of one recording per month may have been too much time between recordings and contributed to the small number of total recordings provided during the QI Project. It is also recommended that the individual or individuals who code the audio recordings complete a formal training in the MI tool that will be used. While no MI coding tool was used in this project and some coding tools may seem self-explanatory, the facilitator of group supervision intended to do the coding without having been formally trained in the MITI because there was no MITI training available during the course of the QI Project.

A future MI knowledge and skill building program may also want to consider using the same individual for both the initial MI training and the follow up strengths-based group supervision. It is possible that the group facilitator and the initial trainer had different styles of providing MI knowledge, skills, feedback, and training methods that were not consistent with one another which could have negatively influenced how well or how poorly MI skills and
knowledge were retained by the participants. Also, it could be important to measure the group facilitator’s fidelity to whatever model of supervision is used during group supervision to determine if that approach to supervision may be moderating how well MI skills and knowledge are retained by those participating in supervision.

Capturing more of the clients’ demographic information may also be useful for future projects. Much of the research on MI increasing attendance rates has been conducted on clients with substance use disorders. The QI Project reported that one of the two outpatient sites had more clients with a mental health diagnosis and the other site had more clients who had a substance use disorder diagnosis. There may be value in investigating whether the clients diagnoses played a role in their attendance rates, or differentially affected attendance rates for those clinicians who participated in the QI Project compared to those who did not. Also, it may be useful to explore whether other clinician demographic information might be relevant in these regards, such as age, gender, race, ethnicity, sexual orientation, education level, and income level. Exploring the demographic information of the clinicians and examining possible relationships between clinician and client demographics could potentially glean useful information in understanding with whom MI is most and least effective in influencing attendance rates and how best to utilize it when working with different populations.

During the five months of group supervision the participants of the QI Project also expressed that they preferred some parts of supervision compared to others, which influenced the content of supervision during the QI Project. The facilitator used MI skill worksheets, role-play activities, MI demonstrations, and MI session video examples during supervision. The activities for supervision were chosen by the facilitator based on research by Bernard and Goodyear (2014), Falender (2014, 2018) that reflects the need for supervision to include components of
enhancing clinical competence, supporting and encouraging the supervisees’ development, collaboratively developing goals, and enhancing the supervisees’ reflection on clinical practice. These concepts of supervision combined with Schwalbe et al.’s (2014) and Herschell et al.’s (2010) recommendation of MI knowledge and skill building to include ongoing coaching, feedback, regular supervision, and utilize multi component training methods were thought to be the best combination of learning tools for group supervision. As the supervision progressed, the participants in the QI Project requested more role-play activities, homework, and MI video demonstrations. A future study will include more of the requested activities earlier in the supervision process.

Future research may also explore whether the clinicians stated theoretical approach to therapy before the project played a role in their MI usage, whether the two approached were compatible, and whether the clinician perceived the two as compatible. A clinician’s theoretical approach to therapy is a described by Rihacek and Roubal (2017) as a clinician’s total set of traits that are used to conduct therapy. While MI is described as a style of counseling that help clients resolve feelings of ambivalence through the use of a few techniques and can be used in conjunction with most all other approaches to therapy, clinicians previously held approaches to therapy may have influenced their use of MI (Rollnick & Miller, 2013). The QI Project did not glean the theoretical approaches to therapy of the participants in this project.

A future study may also consider using a self-assessment tool. The clinicians that participated in the QI Project had various degrees of knowledge about MI before it began, not all of it accurate. Assessing MI knowledge and preconceived ideas about MI clinicians had before the project as well as how that may influence their experience in training and supervision could be valuable in determining a future didactic approach. Also, allowing clinicians to assess their
own knowledge and comfort with MI before and after a similar project could help is assessing MI knowledge and skill gains.

Other areas recommended for future research are using group supervision versus individual supervision, the frequency of supervision (more or less frequent), using different theoretical orientations to group supervision (cognitive behavioral therapy, psychodynamic, feminist, developmental, etc.), and conducting MI supervision over longer periods of time and having supervision less frequently.

**Conclusion**

Clients missing appointments is a ubiquitous problem in mental health and substance use disorder treatment that comes at a great cost to clients, clinicians, and clinics. As a byproduct of this deleterious issue, more research into what causes clients to miss appointments and how to reduce missed appointments is being conducted. While it is not entirely clear what all of the contributing factors are that lead to missed appointments, we have found that therapist use of MI in treatment sessions may mitigate the client attendance issues. There also does not currently exist a standard MI training protocol used by all MI trainers, therefore making it difficult to assess what MI knowledge and skills are being taught, and how MI is being taught universally across MI trainings and workshops. In regard to MI training, though, multiple research studies reflect that a single MI training or workshop without any follow up may not be enough training for effective long-term MI knowledge and skill retention (Madson et al., 2016; Forsberg et al., 2010; Martino et al., 2008; Schwalbe et al., 2011; Decker & Martino, 2013; Barwick, zbennett, Johnson, McGowan, & Moore, 2012).

Clinician use of MI to increase attendance is a relatively new concept and there is still much to be learned. While this study was not able to find a statistically significant difference in
the clinicians’ attendance rates during the QI Project compared to attendance rates before the project, nor differences in attendance between the clinicians that participated in the project to those who did not, this study still has value to the counseling field. Clinical use of MI may have mitigated the effect of seasonal decreases in client attendance, and the QI Project conducted on a grander scale with more participants may have produced statistically significant results. Also, another step towards investigating the utility of clinician use of MI is to replicate this project in other levels of care (partial hospitalization, inpatient, residential), focus on one diagnosis for treatment (mental health or substance use disorder), and to investigate other approaches to follow up to an initial MI training (styles of supervision, time between supervisions, group versus individual supervision). There would also be a benefit to replicating the QI Project using a MI fidelity tool to measure clinical adherence to MI over time. A MI fidelity tool would help answer the question of whether the initial MI training and MI follow up supervision are having the desired effect of increasing clinical MI knowledge and skills that are being used in sessions with client. Knowing how well clinicians are using MI in session would help tease out whether clinicians are effectively using MI in session and separately, whether MI use is in turn helping to increase client attendance.
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