ROUTINE OUTCOME MONITORING AND CLINICAL SUPERVISION:

DO THERAPISTS REALLY CARE ABOUT THEIR PATIENTS?

By

Kyle Raymond Kwon Dexter, M.S.

A Dissertation Submitted in Partial Fulfillment of the Requirements

for the Degree of

Doctor of Philosophy

In

Clinical-Community Psychology

University of Alaska Fairbanks and Anchorage

August 2017

APPROVED:

Jason Whipple, Committee Chair
Eric John (EJ) David, Committee Member
Valerie Gifford, Committee Member, UAF Program Director
Cecile Lardon, Committee Member, Chair, *Department of Psychology*
Todd Sherman, Dean, *College of Liberal Arts*
Michael Castellini, Dean, *Graduate School*

Abstract

Psychotherapy has repeatedly been shown to be an acceptable form of treatment for a variety of psychiatric conditions. However, despite the success of psychotherapy, not all patients improve during a course of treatment. In fact, research has suggested that some patients actually become worse while engaged in psychotherapy. Thus, it becomes important to identify patient deterioration and provide this information back to therapists. Additionally, the ability to detect patient deterioration cannot be solely the result of clinician judgment. Research has shown that utilizing actuarial methods of identifying patient non-responders is superior to that of clinician judgment alone. In turn, the field has moved toward implementing routine outcome monitoring tools/management systems to assist in the process of identifying patients who are failing to respond to treatment. The present study explored potential relationships between routine outcome monitoring, deliberate practice, and routine clinical supervision. Results suggest that the vast majority of practicing therapists do not utilize routine outcome monitoring tools/management systems as part of their daily practices of psychotherapy, and most do not incorporate feedback results into their personal clinical supervision experiences. Additionally, results suggest that therapists who have received formalized training with routine outcome monitoring tools and/or are required to engage in weekly supervision, are more likely to monitor their patient outcome as part of their daily practices of psychotherapy. Moreover, self-assessment bias seems to be present within the sample in regards to identifying patient improvement, non-response, and deterioration. Implications for clinical practice and research are discussed, along with limitations and future directions.

Table of Contents

Page

List of Tables

Page

Introduction

The effectiveness of psychotherapy as an acceptable form of health care has been well documented (APA, 2013; Lambert, 2013; Smith, Glass & Miller, 1980). Decades of research have overwhelmingly supported the use of psychotherapy as a treatment for a variety of psychiatric conditions (Lambert & Ogles, 2004). The efficacy of psychotherapy has consistently produced large effect sizes in the treatment of mental illnesses including conditions such as mood disorders, anxiety disorders, and personality disorders (Lambert, 2013). In fact, psychotherapy has even been shown to be more effective than certain "evidenced based medical practices," especially pharmacological interventions (Wampold, 2007). This is especially important considering the rising costs of health care and the side effects associated with certain medical treatments and medications. As a result, psychotherapy has become a first line treatment option for individuals suffering from a mental illness.

Despite the success of psychotherapy for the treatment of mental illness, the literature has also demonstrated there are still areas where improvements can be made. On the surface, the questions are simple: How does psychotherapy work and how can we make it better? Unfortunately, answering these questions has been rather complicated. Determining how psychotherapy "works" and how it can be improved requires an understanding of scientific methodologies and the nuances of clinical practice. Moreover, since psychotherapy is a relational endeavor between the patient and therapist, psychotherapy outcome studies might also involve the

exploration of individual patient and/or therapist characteristics. Consequently, attempting to parse out each of the separate variables that influence psychotherapy quickly becomes a complex task requiring deliberate thought and action.

Accordingly, the following sections will outline a study that seeks to extend the current body of knowledge referred to as psychotherapy outcome. Specifically, it will present an overview of differing, yet relevant, research methodologies and how each of their separate frameworks has collectively produced findings that are both scientifically rigorous and relevant to routine practice settings. Next, routine outcome monitoring will be examined as an example and component of the most current research methodologies. This section will include a brief history of the development and need for routine outcome monitoring tools/management systems, examples of routine outcome monitoring/management systems, and the associated empirical support. This section will be closed with a discussion examining the possible relationship between a therapist's willingness to utilize routine outcome monitoring tools/management systems and what is currently known throughout the literature as "deliberate practice." Finally, an argument is made that clinical supervision, in its current form, is woefully lacking in regards to improving overall patient outcome. Afterward, the proposed study is specifically delineated. As such, this proposed study hopes to explore the relationship, if any, between routine outcome monitoring tools/management systems, deliberate practice, and routine clinical supervision.

Chapter 1 Methodological Paradigms in Psychotherapy Outcome: Bridging the Gap from Science to Practice

Aspirations regarding the utilization of research as a means to inform clinical practice has been an area of inquiry for many years (Barkham & Mellor-Clark, 2003). Thus, there have been many attempts to bridge the gap between research and practice. One method arose out of the 1949 Boulder Conference and produced the "scientist-practitioner" training model (Barkham & Mellor-Clark, 2003). Implementation of the scientist-practitioner model has since pushed the field of psychology towards developing practice guidelines and policy recommendations that include the application of scientific findings in routine practice settings (Barkham & Mellor-Clark, 2003). In fact, the evidence-based practice movement within the United States and United Kingdom was an attempt to guarantee that the rigors of science would be incorporated within the realm of psychotherapy (Barkham & Mellor-Clark, 2003). However, practitioners became concerned over the relevance of scientific findings due to the fact that real-world clinical settings are often quite different from research-based settings (Barkham & Mellor-Clark, 2003). In turn, this tension between the "scientist and the practitioner" has been encapsulated through what has been described as the efficacy versus effectiveness debate.

1.1 Efficacy Research

Understanding the methodological history that has directed psychotherapy outcome research studies begins with examining efficacy research. Accordingly, a distinction must be made between psychotherapy efficacy research and psychotherapy effectiveness

research. Efficacy studies known throughout the literature as randomly controlled trials (RCTs) have long been the gold standard for determining whether particular treatments work (Wells, 1999). Efficacy research describes studies that, by design, implement a variety of experimental controls in order to limit the amount of extraneous variables that may potentially confound the results of the study (Wells, 1999). These controls include sample homogeneity, randomization, intervention delivery, the type of setting in which the intervention takes place, standardized protocols, and the blinding of participants, providers, and evaluators (Hoagwood, Hibbs, Brent & Jensen, 1995; Wells, 1999).

Within the context of psychotherapy, these studies typically compare a specific type of psychotherapy treatment for a specific diagnosis against another form of psychotherapy treatment, no treatment, or placebo groups (Lambert, Hansen & Finch, 2001). Additionally, these studies tend to be highly supervised in order to ensure treatment adherence (Lambert, Hansen, et al., 2001). In turn, the strength of RCTs is their ability to determine causality or increase internal validity (Wells, 1999). However, the RCT framework is not without its own set of limitations. The highly controlled nature of RCTs decreases their overall generalizability (Seligman, 1995). That is, RCTs' reliance on isolated services, unrealistic control conditions, and sample representativeness all are threats to the generalizability of their findings (Clarke, 1995). Finally, RCTs tend to rely on the outcome of group averages, meaning that their statistical findings might not actually capture the experience of each patient that is seeking treatment (Wells, 1999). In other words, the statistical methods utilized to determine causality often overlook the "unmeasured characteristics" that may in fact impact treatment outcome (Wells, 1999, p. 8). Despite these limitations however, RCTs have been at the forefront of uncovering whether or not

differing forms of psychotherapy work in the manner in which they are intended since the beginning of psychotherapy outcome research.

1.2 Effectiveness Research

In stark contrast to the RCT paradigm, researchers and practitioners have developed effectiveness research. These types of studies are also known as "pragmatic trials" and seek to uncover the benefits of a particular treatment as it is conducted within "real world" settings (Gartlehner, Hansen, Nissman, Lohr & Carey, 2006, p. 1040). Indeed, effectiveness trials, or studies, recruit therapists who are already working within clinical settings and are treating patients as part of a routine referral system (Hunsley & Lee, 2007). Instead of highly controlled experimental designs (RCTs), researchers are attempting to test hypotheses and collect data in naturalistic, clinical settings. These types of studies have employed post treatment measures and program evaluations in hopes of producing more pragmatic and generalizable findings (Lambert, Hansen, et al., 2001). Thus, effectiveness research seeks to maximize external validity through heterogeneous samples and naturalistic settings, while hopefully obtaining an acceptable level of internal validity (Hunsley & Lee, 2007; Hoagwood et al., 1995).

However, despite the assumed generalizability of "effectiveness research" findings, problems still arose (Lambert, Hansen, et al., 2001). Lack of experimental controls, time constraints, and dissemination issues have unfortunately diminished the results and impact of this type of psychotherapy outcome research (Lambert, Hansen, et al., 2001). Thus, while efficacy and effectiveness studies represent both ends of the internal versus external validity spectrum, they also possess methodological shortcomings, which limit the

meaning and integration of psychotherapy outcome findings within actual clinical practice (Clarke, 1995). Moreover, the body of research known as the "common factors" of psychotherapy suggests that, on average, there are no significant differences in either efficacy or effectiveness in regards to psychotherapeutic modalities (APA, 2013; Lambert, 2013; Laska, Gurman & Wampold, 2014; Rosenzweig, 1936). In other words, the research methodologies (efficacy versus effectiveness studies) utilized to examine psychotherapy outcome have failed to demonstrate any significant differences between theoretical orientations. Efficacy and effectiveness research methodologies are yielding the same outcome results. Accordingly, psychotherapy outcome researchers have since moved on from the efficacy versus effectiveness debate (i.e., Which methodology is better?) due to the fact that no bona fide treatment, approach, and/or modality have been shown to produce superior benefits.

1.3 Patient Focused Research

In response to the efficacy and effectiveness research debate, Howard, Moras, Brill, Martinovich and Lutz (1996) introduced the concept of "patient-focused" research. Their seminal article examined the dilemmas often faced by therapists practicing in the "real world" and the constraints of research methodologies. Not only did they address the challenges that stem from differing methodologies and research findings that are not easily applicable to clinical settings (validity), they also discussed what type of psychotherapy outcome variables should be measured and a lack of research providing clear practice recommendations and guidelines (Howard et al., 1996). Additionally, they further contextualized their understanding of the efficacy versus effectiveness debate by

addressing such topics as the current landscape of managed health care organizations, insurance premiums, increased health care related costs, and other systemic, social, and cultural barriers that prevent individuals from accessing care (Howard et al., 1996). Thus, their article, which examined the available literature at the time, is credited with initiating the "patient-focused" research movement within psychotherapy outcome studies. Accordingly, Howard et al. (1996) articulated the following goals for pursuing research agendas concerned with psychotherapy outcome:

1. We can evaluate the expected effectiveness of treatment.
2. We can group patients on the basis of their expected response to treatment and search for clinical consistencies within these groups.
3. We can study the characteristics of patients whose response to treatment deviates from expectation (e.g., examine faster responders, slower responders, non-responders).
4. We can compare providers or provider groups on a case-mix adjusted basis (i.e., adjusting case loads for expected treatment responsiveness of the patients).
5. We can compare treatments in terms of dose-response relationships (the process of outcome) as well as in terms of final outcome (Howard et al., 1996).

Consequently, research findings derived from this framework can provide therapists, supervisors, case managers, and administrators crucial treatment information that can be used to adjust treatment in real time, or on a session-to-session basis (Lambert, Hansen, et al., 2001). As opposed to clinical trials, which emphasize predictions based on aggregate data, and effectiveness research that hopes to uncover the benefits of psychotherapy in routine practice settings, patient-focused research simply seeks to explore, "Is this

particular treatment working for this patient?" (Lambert, Hansen et al., 2001, p. 159). In doing so, all three types of research work together in order to inform the practice of psychotherapy and establish an empirical footing for psychotherapy outcome research (Lambert, Hansen et al., 2001). Put another way, the patient-focused research is an additional type of research methodology that builds upon efficacy and effectiveness studies in an attempt to further add to the ongoing literature concerned with psychotherapy outcome. In short, it is a third type of methodology that can be applied to the area of psychotherapy outcome.

Accordingly, patient focused research has provided both therapists and researchers with additional information regarding the dose-response relationship of psychotherapy (i.e., The average amount of symptomatic change based on treatment duration?), treatment progress patterns, and potential patient deterioration with respect to a variety of patient populations (Castonguay, Barkham, Lutz & McAleavey, 2013). In turn, the main benefit derived from the patient focused research movement would be that it has re-situated the efficacy and effectiveness debates within the realm of improving overall treatment outcome, versus simply attempting to delineate which therapeutic school and/or theoretical orientation is the most effective (Lutz, De Long & Rubel, 2015). Toward that end, patient focused research emphasizes individual treatment outcome in an effort to determine how individual courses of treatment might be improved (Lutz et al., 2015). In other words, it assists in the process of understanding patients and their treatment individually, (i.e, Does this particular treatment work with this particular patient?).

Although obvious, the critical component of patient focused research is the actual patient. Therefore, patient-focused research is built upon a foundation of soliciting

feedback from patients regarding their treatment, and then working collaboratively to integrate those findings into the overall treatment plan (APA, 2006; Castonguay et al., 2013). Coincidentally, soliciting patient feedback is a component of clinical expertise, which is a core feature of evidence-based practices in psychology (APA, 2006).

1.4 Evidenced-Based Practices in Psychology

In 2005, the American Psychological Association (APA) convened a Presidential Task Force on Evidence-Based Practices. The task force was charged with addressing the role of evidence-based practices as it pertains to the field of psychology within the context of the public health care system and public health care policies (APA, 2006). The collaboration of the task force members resulted in their proposed definition for evidence-based practice in psychology (EBPP) (APA, 2006). The task force defined EBPP as "the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences" (APA, 2006, p. 273). The broad nature of this definition was addressed in later sections of their paper. In particular, they determined what was to be considered "clinical expertise." The APA Task Force (2006) explained that

> Clinical expertise also entails the monitoring of patient progress (and of changes in the patient's circumstances – e.g., job loss, major illness) that may suggest the need to adjust the treatment (Lambert, Bergin & Garfield, 2004). If progress is not proceeding adequately, the psychologist alters or addresses problematic aspects of the treatment (e.g., problems in the therapeutic relationship or in the implementation of the goals of the treatment) as appropriate. (p. 277)

Specifically, the "monitoring of patient progress" was discussed as being critical to the efficacy of treatment and clinical utility (APA, 2006). That is, clinicians should employ a systematic and scientific evaluation of whether their treatments are working with their patients, while simultaneously considering the applicability, feasibility and usefulness of their interventions within the context of the treatment setting. It should be noted that while the APA Task Force (2006) provided a general description of "monitoring patient progress" they did not include a specific method and/or technique for *how* the monitoring of patient progress might be accomplished. For example, clinician judgment (which is discussed later) could be one possible method of "monitoring patient progress." However, regardless of how patient progress is monitored, the fact that the APA Task Force (2006) included it as a component of "clinical expertise" seems to indicate that it is a critical aspect of evidenced-based practices.

1.5 Evidence-based Practices in Psychology: Soliciting Patient Feedback & Monitoring Patient Progress

When considering "clinical expertise" within the context of evidenced-based practices, soliciting feedback from patients regarding their treatment might be at least one avenue toward developing "clinical expertise" (Lambert, 2010). The process of asking patients about their experience while engaged in therapy would be one example of what is known as outcome monitoring. Outcome monitoring/measurement attempts to assess treatment outcome through the use of standardized measures of clinical severity (Brown, Burlingame, Lambert, Jones & Vaccaro, 2001). In other words, outcome monitoring hopes to capture a patient's actual response to treatment in an effort to enhance treatment.

Outcome monitoring tools require at least two data points, such as the start of treatment and another occurring at a later date (e.g., termination session, follow-up session) (Brown et al., 2001). Ideally, outcome monitoring follows a repeated measures process that tracks both the amount and rate of change (e.g., session to session administration) (Brown et al., 2001). Additionally, this real time, or session to session, feedback being provided to therapists regarding patient progress appears to coincide with the APA Task Force's definition of "clinical expertise" and engages patients' perspectives on their treatment (Lutz, Martinovich, Howard & Leon, 2002). Furthermore, it appears that outcome monitoring plays a crucial role in outcome management (Brown, Lambert, Jones & Minami, 2005). However, the term "outcome management" is distinctly different than "outcome monitoring."

Outcome management is designed to improve overall effectiveness of health care services within a health care system. Instead of individual treatment outcome monitoring, outcome management seeks to discover whether or not services are improving over time throughout the entire system (Brown et al., 2001). This practice allows for policy makers, administrators, supervisors, etc. to examine the effectiveness of psychotherapy across a wide range of treatments and patients (Lambert, 2010).

Clearly, outcome monitoring and outcome management work together to improve psychotherapy and overall health care services. However, when considering the APA Task Force's (2006) definition and emphasis on the development of "clinical expertise," soliciting feedback from patients about their experience in psychotherapy is at least one method therapists could utilize to monitor patient progress. Understanding evidence-based practice through this conceptual lens decreases the emphasis on RCTs or empirically

supported treatments, and moves psychotherapy outcome research towards what is now known throughout the field as "practice-based evidence" (Margison, et al., 2000).

1.6 Practice-Based Evidence Approach

Recall that the patient focused research movement was started in hopes of better understanding an individual course of psychotherapy through asking the patients themselves what made their treatment the most effective. This research framework helped pave the way towards what is now known as practice-based evidence (APA, 2006; Castonguay et al., 2013). Practice-based evidence, like patient focused research, is based on the assumption that improving psychotherapy is derived from demonstrating that interventions are effective for individual patients in "real-life practice settings" (Barkham, Mellor-Clark, Connell & Cahill, 2006, p. 10). Castonguay and colleagues (2013) believe that "practice-based evidence is premised on the adoption and ownership of a *bona fide measurement system* and its implementation as standard procedure within routine practice" (p. 98). In other words, practice-based evidence may be viewed as patient-focused methodologies implemented within a routine care setting.

The implementation of a bona fide measurement system, may include outcome monitoring tools/management systems, which are typically administered pre-/post therapy, repeated intervals, and/or session to session within routine care settings (Castonguay et al., 2013). Benefits of practiced-based evidence include: the reconciliation of competing interests between researchers (who often lack clinical experience) and practitioners (Barkham & Mellor-Clark, 2003), researchers can work collaboratively with practitioners to explore research questions regarding service delivery that result in

appropriate and applicable treatment recommendations (Dupree, White, Olsen & Lafleur, 2007), and practitioners have a tendency to rely more on practiced-based evidence research findings than other types of research, such as RCTs (Lucock et al., 2003). Therefore, practiced-based evidence has the potential to impact the practice of psychotherapy at both the individual and community levels. Whether a therapist is working in private practice, a community based agency, or a large-scale health care organization, practice-based evidence can assist in the process of improving their individual treatment delivery. However, practice-based evidence also allows for practitioners to create provider networks that encourage the sharing of research expertise, resources, and data that can then be utilized to grow the existing base of evidence regarding psychotherapy practice, process, and outcome (Castonguay et al., 2013). Thus, practice-based evidence seeks to empower clinicians who are hoping to increase their effectiveness through exploring issues that are important, relevant, and salient to their unique treatment contexts (Barkham et al., 2006).

In closing this section, it should be noted that practice-based evidence is not a move to eliminate evidence-based practices. Nor should it be interpreted as a competitive research paradigm. Rather, the practice-based evidence framework endeavors to take advantage of practitioners' clinical expertise in an effort to enhance psychotherapy for a particular therapist in a particular setting. Therefore, it draws upon the principles of patient-focused research, and begins to close the gap that exists between evidence-based practices and research findings that are actually applicable to "real-life" settings. Indeed, each of these complementary research paradigms point toward the use of routine outcome

monitoring tools/management systems in order to identify patient deterioration and hopefully to adjust treatment accordingly to improve psychotherapy outcome.

Chapter 2 Routine Outcome Monitoring (ROM)

Collectively, patient-focused research, evidence-based practices, and practice-based evidence has produced research which has overwhelmingly suggested that soliciting patient feedback is critical when hoping to ensure a positive treatment outcome. It should be made clear that alternative methodologies (efficacy and effectiveness studies) may have solicited information from patients, but those studies did not always utilize outcome measures that were reliable, valid, and/or sensitive to change (i.e., components of a bona fide measurement system). Nor was the feedback being provided during a course of treatment, or on a session-to-session basis, all of which are suggested basic components of routine outcome monitoring tools (Ogles, 2013). Additionally, efficacy and effectiveness studies were not always conducted in routine care settings. A more comprehensive discussion regarding routine outcome monitoring will be presented in later sections. Nonetheless, it is possible that practicing therapists have not been and/or are still not using the most effective methods for soliciting patient feedback.

This unwillingness is especially worrisome because research has consistently demonstrated two facts: patients do deteriorate and therapists are not able to detect treatment deterioration in patients (Bergin, 1971). Regarding the first fact, patient deterioration during a course of treatment appeared to be linked to patient characteristics, but this deterioration has also been correlated with therapist behaviors (Lambert, Bergin, & Collins, 1977). That is, not only were patients deteriorating, *therapists might actually be contributing to the deterioration process*. Thus, patient deterioration, one type of an iatrogenic effect, revealed that psychotherapy produced its own version and type of

treatment side effects (Berk & Parker, 2009; Lilienfeld, 2007). Iatrogenic effects are commonly understood as any type of treatment that unintentionally causes harm (Moos, 2005). Although these (damning) findings were reported in the 1970's, at the time they were largely ignored by practicing therapists (Lambert, 2010). In turn, these research findings suggest that therapists needed to develop methods of soliciting patient feedback that would specifically identify patients at risk for deterioration if they hoped to prevent premature termination and the reduction of iatrogenic effects associated with psychotherapy (Bootzin & Bailey, 2005; Moos, 2012).

While therapists might have been willing to ignore the problem of patient deterioration, third party payers and health administrators were not so quick to overlook ineffective treatments. The fact that at least some patients were failing to respond to psychotherapy became an area of concern for health care facilities interested in cost-related issues (Brown et al., 2001). Consequently, health maintenance organizations, political policies, and economic constraints forced therapists to examine treatment failure. As such, therapists were then faced with the challenge of justifying therapy services (their jobs) while simultaneously acknowledging patient deterioration. As a result, patient-focused research began exploring the development and use of feedback systems or outcome measurement. In turn, these feedback tools and systems began to address the fact that therapists were unable to identify patient deterioration. Thus, these measurement tools and systems were implemented in an effort to identify and reduce patient deterioration, which would hopefully reduce overall health care costs (Brown & Jones, 2005).

Although not part of routine care in 1990, outcome measurement was already considered to be an important part of providing services (Stricker, Troy & Shueman, 2000). In other words, patient deterioration had finally been acknowledged as a phenomenon of psychotherapy and improving care might be derived from providing therapists with feedback about their therapy. Thus, as therapists began to admit that not all of their patients were improving, they began to explore avenues toward identifying patient non-responders. Thankfully, as clinical services were being examined, scientific and technological advances were occurring as well.

Specifically, statistical techniques that assessed patient change over time were developed (Finch, Lambert & Schaalje, 2001; Lutz et al., 2006). Data could now be analyzed to produce models of change indicating levels of deterioration and/or recovery (Lambert, 2010). Furthermore, patient progress could be compared to that of similar patients in an effort to predict treatment success and failure (Lambert, 2010). Therefore, the outcome measurement trend combined with newly developed statistical procedures and technological advancements paved the way to begin addressing patient deterioration actuarially. Actuarial methods for tracking psychotherapy outcome are now available to identify patient deterioration that has continually plagued routine care (Hansen, Lambert & Forman, 2002). Thus, it becomes imperative for therapists to develop methods of identifying patients who are failing to respond to treatment in order to prevent premature termination and/or deterioration.

However, while research has demonstrated that patient deterioration is in fact occurring, and that actuarial methods are assisting in the process of detecting patient non-responders, one question that comes to mind is whether or not they are necessary. In other

words, is soliciting feedback from patients about their treatment through the use of routine outcome monitoring tools (actuarial methods) necessary if therapists can identify patients who are not on-track through relying on their own clinical judgment? Interestingly, early research has suggested that relying on therapists' clinical judgment alone is an inadequate method of identifying treatment failure (Breslin, Sobell, Buchan & Cunningham, 1997; Yalom & Lieberman, 1971).

Therefore, in an effort to find contemporary evidence for these earlier explorations into clinical judgment, Hannan and colleagues (2005) designed a study to compare therapist predictions of patient deterioration to that of actuarial predictions, or the use of routine outcome monitoring tools. Even though participants were made aware of the purpose for the study, therapists were only able to accurately predict deterioration in 1 out of 550 cases (Hannan et al., 2005). Therapists were unable to identify 39 out of the 40 patients who deteriorated versus the actuarial method, which successfully predicted 36 out of the 40 cases (Hannan et al., 2005).

Similar findings regarding the limits of clinical judgment were reported by Hatfield and colleagues (2010). They published findings from a study that explored whether or not clinicians were able to detect patient deterioration based on subjective assessments of treatment progress. Their study included the review of progress notes from patients being seen at a university counseling center (Hatfield, McCullough, Frantz & Krieger, 2010). Seventy patient charts were included in the study and then systematically reviewed in order to determine if patients had deteriorated since originally initiating treatment (Hatfield et al., 2010). Out of the 70 patients who were included in the study, 15 were identified by their therapists as treatment non-responders, 6 indicated no change, 2

reported improvement, 6 included the actual outcome measure score in their progress note, and 41 therapists made no mention as to deterioration, no change, improvement, and/or outcome measure score (Hatfield et al., 2010). When the patient charts of the therapists who noted deterioration explicitly, and the therapists who reported the outcome measure score (suggesting that therapists might have been aware of deterioration) are combined, (n=21) results suggested that the most common follow up treatment interventions consisted of medication referrals, continue with treatment as usual, and change treatment implementation (Hatfield et al., 2010).

Follow up analyses of the same data set examined only the patients who reported the most severe amount of deterioration based on deviation from their intake outcome measurement score. This analysis resulted in the inclusion of 41 cases in the follow up study, with only 13 (31.7%) of the cases indicating patient deterioration in the progress note (Hatfield et al., 2010). In turn, this means that no mention of deterioration was indicated in the progress note of approximately 70% of the most severely deteriorated patients (Hatfield et al., 2010). These results suggest that therapists, despite the access to routine outcome monitoring tools/management systems, either chose not to mention patient deterioration in their notes or, worse yet, were unaware that deterioration was actually occurring. Moreover, even when therapists were aware of patient deterioration, they did not report seeking out supervision and/or consultation as one possible corrective action (Hatfield et al., 2010).

Clinician judgment was further explored through research conducted by Walfish, McAlister, O'Donnell, and Lambert in 2012. Results from their research study suggest that 25% of mental health professionals rated themselves in the 90th percentile when compared

to their peers. This study revealed that in comparison to the available literature, clinicians appeared to overestimate their rates of patient improvement and underestimate their rates of patient deterioration (Walfish et al., 2012). As a result, it appears therapists not only have a tendency to rely on their own clinical judgment regarding patient change and treatment progress, but their self-assessments are both biased and inflated. Even more interesting, this trend continues despite the empirical evidence that suggests actuarial methods are better at identifying treatment non-responders. These results should be cause for alarm. In response to the phenomenon of patient deterioration, therapists choose to not utilize routine outcome measures/management systems, rely on their own clinical judgment versus actuarial methods, and justify their actions through an erroneous and flawed belief that they are "better therapists" than their peers. This evidence in turn should make it clear that routine outcome monitoring must become a component of deliberate practice due to the fact that clinician judgment is often incorrect.

Unfortunately, the limitations of clinical judgment are not restricted to the studies completed by Hannan et al., (2005), Hatfield et al., (2010), and Walfish et al., (2012). Grove et al., (2000) conducted a meta-analysis that compared human judgment/diagnostic abilities with statistical methods of determining diagnoses. Their results suggest that statistical methods are more accurate than human judgment (Grove, Zald, Lebow, Snitz & Nelson, 2000). Garb (1998) published findings that suggest clinicians have a tendency to be overly confident in their clinical decision-making despite evidence to the contrary. Finally, Garb (2005) published findings that corroborated the Hannan et al. (2005) results suggesting actuarial methods of predicting patient progress are superior to that of clinical judgment.

In closing this section, it should now be obvious that patient deterioration is a reality of psychotherapy. Improvement is not guaranteed for every patient. In fact, research would suggest patient deterioration is guaranteed for a certain percentage of patients. Thus, it is vital that therapists solicit feedback from patients in order to identify patients at risk for treatment failure. More importantly, clinical judgment alone is not an effective method of identifying patient deterioration. Actuarial methods must be utilized to assist in the process of identifying patient deterioration. Luckily, this task has already been addressed, by both researchers and practitioners, who have long been concerned with enhancing psychotherapy outcome and ensuring the highest level of patient care possible. Accordingly, the next section will briefly describe a variety of outcome monitoring tools/management systems that are currently available for implementation within routine care settings.

2.1 Examples of Routine Outcome Monitoring Systems

The Integra/COMPASS Tracking Assessment system was the first to be developed for use within psychotherapy (Howard et al., 1996). It assessed patient functioning on a monthly basis in regards to self-reported well-being, symptomology, and life functioning (Howard et al., 1996). Next, the Outcome Questionaire-45 (OQ-45) (Lambert, Morton et al., 2004) was designed to measure real-time, or session-to-session, patient change while also identifying deterioration cases and patients at risk for premature termination. Kordy, Hannover, and Richard (2001) developed a computer-assisted outcome monitoring system known as AKQUASI. It collects data on patient characteristics, therapeutic alliance, and patient satisfaction in an effort to inform ongoing treatment (Kordy et al., 2001). The Clinical Outcome in Routine Evaluation (CORE) system (Barkham et al., 2001) and the

Treatment Outcome Package (TOP) system (Kraus & Horan, 1999) have both been utilized in the United Kingdom to provide feedback to both therapists and administrators in order to inform decisions regarding interventions and overall benchmarks of care. This application is of particular note because outcome monitoring has become an important avenue for providing organizational feedback, guiding systems-level interventions, and relaying information to administrators and staff working towards improved quality controls and performance (Marty et al., 2008). The brevity of the Partners for Change Outcome Management System (PCOMS) (Miller, Duncan, Sorrell & Brown, 2005) and the Outcome Rating Scale (ORS) (Duncan & Miller, 2008) make them both clinician friendly and simple to use for facilitating discussion of the results with patients due to the fact that both outcome measures are completed in the presence of the therapist. In short, there are a variety of outcome measures that are reliable, valid, and possess the ability to capture the changes made during a course of psychotherapy (Whipple & Lambert, 2011). Utilizing these sorts of clinical tools can aid in the process of protecting patient safety and ensuring positive therapeutic outcome (Christensen, Russell, Miller, & Person, 1998; Harmon et al., 2007).

In addition to the wide variety of outcome monitoring tools/management systems, many governing bodies have explicitly endorsed the use and implementation of outcome monitoring within routine systems of care. Specifically, the Substance Abuse and Mental Health Services Administration (SAMHSA) National Registry of Evidence-based Programs and Practices (NREPP) includes both the OQ-45 and the PCOMS outcome management systems as programs that meet strict practice standards (SAMHSA, 2016). Thus, it should be clear that routine outcome monitoring tools/systems are scientifically sound, widely

available, and easily accessible. However, just because the routine outcome monitoring tools/management systems might be integral components of patient-focused research, evidence-based practices, and practiced-based evidence in the delivery of psychotherapy, empirical studies were still needed in order to determine if their use could actually enhance psychotherapy outcome.

2.2 Routine Outcome Monitoring: Empirical Support

Recall that research suggests not all patients benefit from participating in psychotherapy. Accordingly, psychotherapy outcome studies began exploring the effects of soliciting and providing patient feedback to therapists in an effort to address patient deterioration (Lutz, De Jong & Rubel, 2015). Lambert, Whipple, Smart, Vermeersch, Nielsen, and Hawkins (2001) designed a study that included 609 patients separated into four groups. Two groups were experimental and two were control groups. The experimental groups received feedback about patient progress while the control groups did not receive feedback (Lambert, Whipple, et al., 2001). This type of research design was chosen in order to determine if providing feedback to therapists about patient progress impacted number of sessions attended and overall treatment outcome (Lambert, Whipple, et al., 2001). Results suggested that patients who were enrolled in the feedback group, and were predicted to deteriorate, increased the length of their treatment and showed improved outcome. These results were not observed regarding the patients who were enrolled in the no-feedback group and were predicted to be treatment failures (Lambert, Whipple, et al., 2001). Moreover, twice as many patients who were being seen by a

therapist receiving outcome measure feedback achieved clinically significant or reliable change (Lambert, Whipple, et al., 2001).

In 2002, the Lambert research group conducted a replication study of their 2001 project. However, this project included 1020 patients divided into four groups (Lambert et al., 2002). Again, there were two experimental groups and two control groups (Lambert et al., 2002). Results suggest that providing feedback to therapists during treatment not only increased treatment length but also improved outcome for not-on-track patients (Lambert et al., 2002). Additionally, patients assigned to the feedback group (experimental group) demonstrated clinically significant or reliable change and reduced the risk of deterioration by the end of the study (Lambert et al., 2002). These findings successfully replicated results from their 2001 study. Moreover, the 2002 study revealed that patients made statistically significant gains or improvement after the therapist was provided with feedback versus the therapists who were seeing patients assigned to the no feedback group (Lambert, et al., 2002). That is, once therapists were made aware of the fact that their patients were at risk for possible treatment failure, the feedback provided through outcome monitoring tools assisted in the process of adjusting or altering treatment in a manner that was useful to the patient.

Building upon the knowledge derived from the two aforementioned studies, the same research group enhanced the type of feedback being provided to therapists through the development of "Clinical Support Tools" (CSTs) (Whipple et al., 2003). CSTs provided therapists with additional information regarding the quality of the therapeutic alliance, patient's motivation to change, nature of the patient's social support network, diagnostic considerations, and the potential for pharmacological interventions (Whipple et al., 2003).

Accordingly, Whipple and colleagues designed a study that provided therapists with feedback that included the information found within the CSTs (Whipple et al., 2003). Results suggest that when therapists were provided with CSTs, patients who were identified as not-on-track (NOT) showed recovery and improved outcome (Whipple et. al., 2003). In doing so, this project further supported the hypothesis that providing therapists with real time feedback regarding patient progress can not only reduce the risk of premature termination, but can also be used to suggest practical areas of intervention to ensure positive treatment outcome (Whipple et al., 2003).

Taken together, results from these three studies suggest that when therapists are provided feedback about their treatment, outcome for treatment non-responders can be improved. It should be noted that these studies were specifically interested in patients who were considered to be "Not On Track" (NOT) or were at risk of treatment failure (Lutz et al., 2015). Thus, psychotherapy outcome monitoring was being tested to determine if NOT patients could actually be identified and, if so, could treatment be adjusted in order to prevent premature termination and a negative treatment outcome. It cannot be overstated that these initial studies produced robust results.

In summary, patients assigned to feedback conditions were able to be identified as NOT and produced a 14% reliable improvement rate, in contrast to therapists who did not receive feedback regarding their NOT patients (Lutz et al., 2015). Moreover, NOT patients' rates of deterioration were, on average, 8% lower than the non-feedback group (Lutz et al., 2015). Finally, treatment length could be adjusted appropriately based on patient feedback regarding their own interpretation of their progress (Lutz et al., 2015).

Other psychotherapy outcome studies continued to demonstrate the necessity for outcome monitoring. For example, Hansen et al. (2002) demonstrated that when empirically supported treatments were implemented by experienced therapists who were both supervised and provided treatment to patients with similar diagnoses (RCTs), approximately 35% - 40% of patients failed to benefit from psychotherapy and approximately 5% - 10% deteriorated. In other words, even if there were a "right treatment" or "best practice" for a patient, providers would still need to be able to identify patients who were failing to benefit from this treatment (Whipple & Lambert, 2011). Implicit in this statement is the notion that patients who are not benefitting from therapy can in fact be identified, and this information can subsequently be communicated to providers in a practical and timely fashion (Whipple & Lambert, 2011).

These initial feedback based outcome studies conducted by the Lambert research group have since been replicated with additional patient populations across a variety of different clinical settings. Carlier and colleagues (2010) conducted a systematic review of the literature specifically targeting published studies that included the use of routine outcome monitoring tools (ROM) as part of a standard course of treatment. Their review identified 52 RCTs that utilized ROM and feedback with either adult or older adult patients. It should be noted not all studies were exclusively focused on mental health, but also included studies primarily focused upon physical health. Results suggest that ROM positively influences diagnosis, treatment monitoring, and patient-therapist communication (Carlier et al., 2010).

More recently, Davidson, Perry and Bell (2015) conducted their own systematic review of routine outcome monitoring studies. They reviewed a total of 10 different

studies, two of which were meta-analyses. They discovered that routine outcome monitoring improves outcome for patients that are at risk for treatment failure. However, it appears the effect sizes are reduced as the level of psychiatric severity increases (Davidson et al., 2015). Likewise, Krageloh and colleagues (2015) reviewed 27 different studies that were conducted in the United States, Australia, Germany, United Kingdom, Ireland, Norway and Sweden. Out of the 27 identified studies, results stemming from 25 studies suggest that providing routine outcome monitoring feedback to clinicians significantly improves treatment outcome for patients at risk for deterioration. However, their results also suggested that the relationship between feedback and treatment length remains unclear (Krageloh et al., 2015). Thus, while questions still remain about the specific components of routine outcome monitoring, it appears that providing therapists with feedback regarding not on track patients significantly improves overall psychotherapy outcome.

Not only have systematic reviews of the literature been conducted, meta-analyses have also demonstrated the impact of outcome monitoring and clinician feedback. In 2009, Knaup and colleagues conducted a meta-analysis of 12 studies that included feedback conditions. Six studies were from the United States, four were from the United Kingdom, and two were conducted in Germany. Results suggest that clinicians who received feedback about on going treatment produced small, yet statistically significant effect sizes (d=.10) in regards to patient improvement. While their findings indicated outcome monitoring was more effective in the short-term (9 or fewer sessions), they concluded the long-term impact of outcome monitoring is unknown due to the lack of studies that examine long-term effects (Knaup, Koesters, Schoefer, Becker & Puschner, 2009).

The following year, Shimokawa, Lambert, and Smart (2010) conducted another meta-analysis of studies utilizing outcome monitoring and feedback conditions. Their results demonstrated that providers who were given feedback about their patients' progress had on average higher post-treatment outcome scores, were more likely to improve while in therapy, and less likely to not receive any benefits from therapy as compared to therapists who received no outcome monitoring feedback. More specifically, when therapists were provided with Clinical Support Tools (CSTs) (Lambert, Whipple et al., 2004), a component of the OQ-45 system (one version of an outcome monitoring system), to supplement their work with at risk patients (n=217), 52.5% of patients showed reliable change, 41.9% had no change, and only 5.5% deteriorated. In contrast, when therapists and patients were provided outcome tracking feedback from the OQ-45 system without the use of CST (n=177) 45.2% demonstrated reliable change, 40.1% had no change, and 14.7% deteriorated. Additionally, when feedback was presented only to the therapists (n=263), 37.6% had reliable change, 53.2% had no change, and 9.1% of patients deteriorated. Most importantly, was the finding that suggested when therapists received no feedback (n = 218) and continued with treatment as usual, only 22.3% of patients had reliable change, 57.5% demonstrated no change, and 20.1% of patients deteriorated.

In the same year, Poston and Hanson (2010) published a meta-analysis that examined 17 studies based on the following inclusion criteria: "a) [the] study must address one of the research questions (as articulated by Poston and Hanson's meta-analysis), b) be published in English in a peer-reviewed journal, c) utilize an experimental design suitable for calculating one or more Cohen's d effect sizes, d) measure some aspect of therapeutic benefit, either process- or outcome-related, and e) utilize authentic test results/data (i.e.,

no Barnum-type results)" (p. 205). Combined, their meta-analysis included 1,496 participants, with the earliest study being published in 1963 and the most recent study being published in 2007 (Poston & Hanson, 2010). Their findings produced a robust and significant effect size (Cohens *d*=0.423) (Poston & Hanson, 2010). Based on their analysis, psychological assessment procedures (outcome monitoring), when presented to a patient that is both individualized and collaborative, significantly (statistical and clinical) improve treatment (Poston & Hanson, 2010). Furthermore, based on their findings, Poston and Hanson (2010) suggest that not only is feedback beneficial to patients and their subsequent treatment, but *how* outcome monitoring tools are utilized also plays an important role in the overall impact of outcome measures. In other words, it may not be enough to simply track outcome, but therapists might need to examine how they are actually using them within a course of treatment if they want to ensure the most benefits for their patients.

Finally, in 2011 Lambert and Shimokawa conducted yet another meta-analysis to determine what, if any, the effects of tracking outcome and providing feedback to therapists had on treatment. Unsurprisingly, their results were consistent with previous meta-analyses. Based on their sample, Lambert and Shimokawa (2011) produced findings that suggest, on average, when therapists received feedback about potential patient deterioration, their outcome are approximately 70% better than patients who are judged to be off track and are not providing feedback to their therapists. In turn, Lambert and Shimokawa (2011) argue that patient deterioration rates can be reduced by as much as 50% if therapists choose to utilize some form of routine outcome monitoring tool/system.

Overall, the routine outcome monitoring research has examined a variety of feedback related variables, including the type of outcome monitoring tool/management

system, type of clinical setting, patient population, frequency of feedback, amount of feedback being provided to the therapist, diagnoses, the procedures surrounding the use of feedback, and clinical judgment (Hannan et al., 2005; Lutz et al., 2015). As a result, it is easy to conclude that routine outcome monitoring is an effective method of preventing patient deterioration for patients identified as not on track or at risk for treatment failure. Additionally, routine outcome monitoring research has provided the field with the knowledge that clinician judgment cannot be trusted unequivocally.

In turn, this line of research has made three key points: 1) Routine outcome monitoring tools/management systems are in fact able to identify NOT patients who are at risk for adverse treatment outcome; 2) Routine outcome monitoring tools/management systems, when used properly, improve patient outcome for NOT patients; and 3) Relying on clinician judgment alone to predict and/or discern which patients may or may not be deteriorating is inadequate when compared to actuarial methods. Thus, when considering that psychotherapy is inherently going to involve therapist judgment, it becomes necessary for future research studies to begin exploring therapist characteristics that might be implicated in the decision to implement routine outcome monitoring tools/management systems within routine practice settings.

2.3 Routine Outcome Monitoring: Therapist Characteristics and Deliberate Practice

Considering the amount of empirical evidence that supports the use of routine outcome monitoring tools/management systems, and the amount of routine outcome monitoring tools/management systems available to choose from, it might be easy to assume that they have been widely adopted and implemented throughout routine practice

settings. However, many therapists actively choose to avoid any type of routine outcome monitoring tools/management system. As a result, empirical studies have begun to examine the possible impact of therapist characteristics in regards to the use, or lack thereof, of routine outcome monitoring tools.

The exploration of characteristics that might prevent therapists from choosing to solicit feedback from patients has been examined in a variety of studies. De Jong and colleagues (2012) discovered statistically significant differences between therapists (n=413) who were assigned to either a feedback or no feedback condition regarding their treatment. Their study revealed that females, on average, tended to have more favorable attitudes towards routine outcome monitoring tools (De Jong, Van Sluis, Nugter, Heiser & Spinhoven, 2012). Furthermore, their results suggest that therapists who relied on their own subjective assessments of treatment progress, versus outcome feedback, demonstrated slower rates of improvement for patients identified as being not-on-track (De Jong et al., 2012). Additionally, De Jong and colleagues (2012) revealed that the earlier therapists begin utilizing patient feedback to direct treatment, the faster patients seemed to progress. In short, their study points to the fact there are perhaps specific therapist characteristics that are implicated in the decision to use, or not use, routine outcome monitoring tools/management systems.

In turn, Smits, Claes, Stinckens, and Smits (2015) conducted a study that explored the potential impact of therapist characteristics on the use of routine outcome monitoring tools. Their project included a total of 170 different therapists working in subsidized outpatient, in-patient, and private practice settings (Smits, Claes, Stinckens & Smits, 2015). Their results suggest that therapists who received formalized psychotherapy training

possessed more favorable attitudes towards outcome monitoring tools versus those who lacked such training (Smits et al., 2015). Additionally, they discovered that therapists working in private practice and in patient settings viewed outcome monitoring tools more favorably than therapists in subsidized outpatient clinics (Smits et al., 2015). Thus, based on the work of De Jong et al. (2012) and the work of Smits et al. (2015) there appears to be a relationship between the use of routine outcome monitoring tools/management systems, therapist characteristics, and the type of health care setting.

In an effort to build on these findings, De Jong and De Goede (2015) conducted a follow up study investigating why some therapists choose not to utilize outcome monitoring tools/management systems. Results of their study suggest that a therapist's motivation (prevent failure/achieve success) and their perceived match between the values of the therapist and the organization that they work for significantly influence therapists' attitudes towards the use of outcome monitoring and their overall outcome (De Jong & De Goede, 2015). In other words, their findings extend the results of the 2014 Smits et al. study and reveal that the interaction between specific therapist characteristics and the culture of the organization/health care facility for which they choose to work impact both the use of routine outcome monitoring tools and overall patient outcome. Therefore, when considering the fact that certain individual characteristics do, in fact, influence whether or not therapists choose to utilize routine outcome monitoring tools, it becomes important for therapists to begin the process of self-reflection if they hope to prevent future patient deterioration.

2.4 Routine Outcome Monitoring: Deliberate Practice

While routine outcome monitoring tools/management systems are easily accessed and implemented within clinical settings, therapist self-reflection is not quite as ubiquitous. In other words, even if every therapist chose to use routine outcome monitoring tools/management systems, simply providing feedback to therapists may not be enough to actually enhance outcome in all cases. Miller, Hubble, Chow, and Seidel (2013) state that "as powerful an effect as feedback exerts on outcome, it is not enough for the development of expertise" (p. 92). This sentiment is echoed empirically through findings derived from a study by Simon, Lambert, Harris, Busath and Vazquez (2012) that concluded feedback concerning not on track patients prevented patient deterioration in approximately 50% of cases, but had no impact for the other 50% of therapists in the study. Thus, the ability to actually learn from feedback and then translate/apply that knowledge within the realm of psychotherapy would perhaps involve some form of self-reflection, which in turn, suggests an additional step. This additional step is currently known throughout the literature as "deliberate practice" (Ericsson, 1996; Ericsson, 2006; Ericsson, 2009, Ericsson, Krampe & Tesch-Romer, 1993). Miller and colleagues (2013) define deliberate practice as follows: "Deliberate practice means setting aside time for reflecting on feedback received, identifying where one's performance falls short, seeking guidance from recognized experts, and then developing, rehearsing, executing, and evaluating a plan for improvement" (p. 92). In fact, research suggests that individuals who achieve elite status within their field of expertise, on average, engage in the deliberate practice everyday (Miller, Hubble, Chow & Seidel, 2013). Additionally, actively choosing to engage in the processes of self-reflection, planning, and practice "engenders the development of mechanisms enabling top

performers to use their knowledge in more efficient, nuanced, and novel ways than their more average counterparts" (Ericsson & Stasewski, 1989; Miller et al., 2013, p. 92). Fortunately, routine outcome monitoring provides one method and impetus to begin self-reflection. Since routine outcome monitoring provides real time feedback to clinicians to consider during the course of psychotherapy, it can also be yet another source and/or starting point for prolonged, active, and thoughtful self-reflection. Accordingly, based on the available literature and the philosophy of deliberate practice, routine outcome monitoring and periods of self-reflection synergistically work together in the development of expertise. However, what remains largely unknown is how routine outcome monitoring, and any subsequent self-reflection, interfaces with the practice of clinical supervision.

2.5 Routine Outcome Monitoring and Clinical Supervision

Clinical supervision has a longstanding role within the training of clinical and counseling psychologists. Specifically, supervision is two fold: (1) it develops professional and applied therapeutic competencies such as, determining theoretical orientation, case conceptualization, treatment planning, basic counseling skills, ethical practices and guidelines, and addressing multicultural issues, while also (2) ensuring patient well-being and positive therapeutic outcome (Bernard & Goodyear, 2004; Falender & Sharanske, 2004). In fact, there appears to be international agreement that clinical supervision is a critical aspect of psychotherapy training and the development of clinical expertise (American Psychological Association, 2006, Australian Psychological Society, 2003, Lambert & Ogles, 1997; Ogren, Jonnson & Sundin, 2005; The British Psychological Society, 2006).

As mentioned previously, therapist judgment and clinical decision-making are inherent features of clinical expertise and evidence-based practices in psychology (EBPP) (APA, 2006). Thus, when considering the role of supervision, clinical judgment by both the supervisor and supervisee must be addressed in an effort to remain consistent with EBPP. This is especially critical when supervisors and supervisees are attempting to render clinical judgments regarding patient progress and treatment outcome.

While it can be assumed that both supervisors and supervisees endeavor to provide the highest quality of patient care, research in previous sections has demonstrated that even experienced psychologists and counselors struggle to identify patients at risk for deterioration (Lambert, 2010). Accordingly, if research has demonstrated that relying on therapists' judgment is an ineffective gauge of treatment progress, then it should come as no surprise that relying solely on supervisees' self-reports of patient progress and treatment outcome would also be an inadequate method of preventing treatment failure (O'Donovan, Halford & Walters, 2011; Worthen & Lambert, 2007). This is especially worrisome considering the fact that the most common method of providing information regarding a course of treatment during supervision primarily consists of supervisors' and supervisees' subjective opinions and impressions (O'Donovan, Halford & Walters, 2011). Further cause for concern comes from considering the literature that has begun to examine therapist characteristics and the use and/or non-use of routine outcome monitoring tools/management systems. In other words, not only are supervisees relying on their clinical judgment to present their cases during clinical supervision, supervisors are also relying on their clinical judgment to provide feedback regarding conceptualization, diagnostic considerations, treatment planning. Compounding the supervision process is the

fact that many therapists, agencies, and organizations are actively choosing not to utilize routine outcome monitoring as a component of the supervision conversation. This is clearly not the type of a "double-blind" study that researchers are hoping to design!

Worthen and Lambert (2007) recommend that ongoing process feedback and outcome monitoring regarding clinical supervision has potential benefits in the following areas: (1) it provides actuarial formulations of therapeutic progress derived from the patient's experience of therapy that can be used to inform training and treatment; (2) the literature has repeatedly demonstrated that training professionals are routinely unable to accurately assess and predict treatment outcome (Hannan et al., 2005; Norcross, 2003); (3) soliciting feedback directly from the patient provides information often overlooked by the treatment provider; (4) the use of process and outcome measures may increase positive therapeutic outcome and prevent premature termination among patients (Swift, Greenberg, Whipple & Kominiak, 2012;); (5) any additional information about the therapeutic relationship may open avenues towards more effective treatment and any subsequent interventions. Moreover, it could also be argued that integrating routine outcome monitoring and reflective discussions regarding their use during clinical supervision is a component of deliberate practice and one method toward developing clinical expertise.

Despite these recommendations, communicating feedback to therapists about patient progress and outcome within the realm of clinical supervision has suffered from a lack of empirical investigation. To date, it appears that there are only two published studies which have attempted to examine the relationship between outcome monitoring and clinical supervision. The first study was conducted by Reese and colleagues (2009),

included therapists in training who were receiving supervision and continuous outcome monitoring feedback (*n*=9) and compared findings to a group of trainees who were receiving supervision but *were* not utilizing routine outcome measures (*n*=10). Data was collected over the course of a year and included 115 separate psychotherapy cases (Reese et al., 2009). Results suggest that the trainees who were assigned to the outcome monitoring group and shared the feedback with their respective supervisors demonstrated statistically-significant better outcome than the group who did not discuss the outcome monitoring feedback with their supervisors (Reese et al., 2009). Additionally, the therapists in training who utilized routine outcome monitoring tools were approximately 50% more effective over the course of treatment (Reese et al., 2009).

The second study examining outcome monitoring and clinical supervision was published in 2014. This study utilized a naturalistic sample, with data collection occurring over five years, and included 6521 patients, 174 trainee therapists, and 23 supervisors (Rousmaniere, Swift, Babins-Wagner, Whipple, Berzins, 2014). The primary finding derived from this study suggests that supervisors accounted for .04% of the variance in patient outcome (Rousmaniere, Swift, Babins-Wagner, Whipple, Berzins, 2014). According to the study's authors, one possible explanation of their findings is that all of the trainees were actively using routine outcome measures which may have overshadowed the supervisor effects on patient outcome (Rousmaniere, Swift, Babins-Wagner, Whipple, Berzins, 2014). This explanation is made plausible based on the available literature that routine outcome monitoring enhances patient outcome. Taken a step further, results from the Rousmaniere, Swift, Babins-Wagner, Whipple, and Berzins (2014) study may even suggest that if supervision is actually going to play a role in improving patient care, then the most

important component of the supervisory process would be to simply require supervisors and supervisees to begin using routine outcome monitoring tools.

Although Worthen and Lambert (2007) have suggested that routine outcome monitoring should be combined with clinical supervision, it remains largely unknown if and/or how outcome-monitoring tools are actually being utilized within the context of clinical supervision. While there is an overwhelming literature base indicating the utility, benefits, and need for routine outcome monitoring, studies have yet to uncover how they are being integrated within supervision of clinical practice. In short, research clearly demonstrates the need to track outcome and discuss the findings with supervisors, but there appears to be no clear answer as to whether or not this is actually being accomplished. Thus, the purpose of this study is to explore whether or not therapists are, in fact, utilizing outcome monitoring tools and, if so, are they discussing the results as part of their supervision process.

Chapter 3 Present Study

The present study is exploratory in nature, scope, and focus. It seeks to begin initial investigations into the occurrence and use of routine outcome monitoring tools by therapists who are receiving clinical supervision. Additionally, any potential relationship between self-assessment bias, self-reflection, and the use of routine outcome monitoring amongst therapists receiving clinical supervision, as potential components of deliberate practice, will be explored as well. Finally, relevant demographic information will be gathered to uncover other potential variables (therapist characteristics) that might be implicated in the use and/or non-use of routine outcome monitoring tools/management systems. The research questions are as follows:

1. Do therapists who are currently practicing and/or receiving clinical supervision utilize routine outcome monitoring tools/management systems?
2. Within the group of therapists that utilize routine outcome monitoring tools/management systems, how many choose to incorporate the feedback results into their clinical supervision process?
3. What is the prevalence of self-assessment bias within the sample utilized for this particular study?
4. What other variables might account for the variation across therapists who: a) use/do not use routine outcome measures; and b) use/do not use outcome feedback as a component of clinical supervision (e.g., level of self-refection, demographic factors, etc.)?

Based on the available literature and guiding theoretical principles, the following hypotheses will be the primary areas of statistical inquiry for the study sample:

Hypothesis 1a: *On average, most therapists will choose not to utilize routine outcome monitoring tools/management systems as part of their day-to-day practices of psychotherapy*.

Hypothesis 1b: *None of the therapist demographic variables will produce a statistically significant difference or relationship in regards to the use of ROM tools/management systems*.

Hypothesis 1c: *General therapist characteristics, specifically in regards to training background, will not produce a statistically significant relationship regarding the use/non-use of ROM tools/management systems*.

Hypothesis 1d: *Systemic influences will not produce statistically significant relationships regarding the use/non-use of ROM tools/management systems*.

Hypothesis 2a: *On average, within the group of therapists who endorse the use of ROM tools/management systems, most will choose not to incorporate feedback results into their clinical supervision process*.

Hypothesis 2b: *Within the group of therapists who endorse the use of ROM tools/management systems, none of the reported demographic variables will produce statistically significant differences or relationships regarding the discussion of ROM feedback results in the clinical supervision process.*

Hypothesis 2c: *General therapist characteristics, specifically in regards to training background, will not produce a statistically significant differences or relationships in regards to the incorporation of ROM feedback results into the clinical supervision process.*

Hypothesis 2d: *Systemic influences will not produce statistically significant differences or relationships regarding the discussion of ROM feedback during the process of clinical supervision.*

Hypothesis 3: *Therapists who choose to utilize ROM tools/management systems will display higher levels of self-reflection and insight.*

Hypothesis 4: *Therapists who discuss ROM feedback within the process of clinical supervision will display higher levels of self-reflection and insight.*

Hypothesis 5a: *Therapists will rate themselves as "above average clinicians" when compared to their counterparts, i.e., they will demonstrate a higher level of self-assessment bias.*

Hypothesis 5b: *On average, therapists will overestimate the percentage of their patients that improve as a result of being engaged in treatment, i.e., they will demonstrate a higher level of positive self-assessment bias regarding patient improvement.*

Hypothesis 5c: *Participants will, on average, underestimate the percentage of their patients that remain the same as a result of being engaged in treatment.*

Chapter 4 Methods

4.1 Recruitment

Convenience sampling was utilized to recruit participants (Singleton & Straits, 2010). The inclusion criterion consisted of the following: 1) Therapists seeing at least one patient but not receiving clinical supervision; 2) Therapists who are seeing at least one patient and receiving supervision; 3) Therapists who are receiving supervision but not actively seeing patients. Therapists who are not receiving supervision and are not seeing patients were excluded from the study (e.g., retired therapists). Type of credential (Ph.D., LCSW, etc.) did not matter in regards to this study. Since therapists and clinical supervisors tend to consult with one another, snowball sampling was employed in an effort to recruit the appropriate number of participants (Singleton & Straits, 2010). Despite the sampling procedures, a deliberate effort was made to develop a culturally diverse sample. IRB approval from the appropriate institution was obtained prior to any data collection.

4.2 Data Collection

A confidential, electronic survey was created and utilized to collect data for the present study. This method of data collection (use of surveys) has been well-documented within the field of psychology (Krosnick, 1999). Participants were solicited to complete an electronic, online survey. The online survey was created and hosted by SurveyMonkey.com (SurveyMonkey, Inc., 2017). Participants were recruited via listservs and/or online directories such as the American Psychological Association Society for the Advancement of Psychotherapy (Division 29) and the American Psychological Association Society of

Counseling Psychology (Division 17). Data were stored on the confidential survey server and the lead researcher's password protected and confidential computer hard drive.

Due to the exploratory nature of the present study, it primarily sought to gather as much relevant data as possible when considering the specific research questions. However, what was considered "relevant" was largely driven by the available literature, coupled with a theoretical understanding of the phenomenon under investigation. In other words, "casting a wide net," which is a component of exploratory studies, must somehow be "anchored" in order to begin initial explorations. Thus, the present study, and the development and selection of survey items, were derived from the literature reviewed earlier in this proposal and combined with the theoretical underpinnings that guide the practice of psychotherapy and therapists receiving clinical supervision. This rationale served as the basis for the development of the survey questions which was subsequently broken out into 4 separate groups: 1) Basic demographic information; 2) Therapist Characteristics (including the SRIS and Self-assessment questions); 3) Systemic Influences; and 4) Specific questions about the participants' current use/non-use of routine outcome monitoring tools/management systems. Additionally, due to the fact that the present study attempted to understand how *therapists* utilize routine outcome monitoring tools/management systems, it was decided that questions pertaining to the *patient's* perspective of routine outcome monitoring tools/management systems would not be included in this particular survey.

Basic demographic information was solicited because it is a common component of empirical studies when attempting to describe the sample population. For the purposes of this study "theoretical orientation" was grouped with basic demographic information due

to the fact that this is generally assumed to be a "basic" component of a therapist's approach to therapy. While the other "basic" demographic information items are typically associated with research studies in general, theoretical orientation was included because the present study sought to further understand an area of psychotherapy. Training background information was gathered based on the available literature that certain "therapist characteristics" influence the decision to use/not use routine outcome monitoring tools/management systems. This same empirical and theoretical framework is extended when hoping to assess for levels of self-reflection and self-assessment bias. However, the self-reflection measure (explained in the next section) and self-assessment bias questions specifically examined these "therapist characteristics" in relation to "deliberate practice." Therefore, these survey items not only attempted to evaluate certain "therapist characteristics" but also link them with other important therapeutic constructs, such as "deliberate practice." The group of questions that inquired as to the participants' "current practice setting and function" hoped to explore the impact, if any, that the surrounding environment exerts on a participant's decision to use/not use routine outcome monitoring tools/management systems. In doing so, it explored the potential relationship between social ecology and routine outcome monitoring tools/management systems. As a result, these survey items began initial investigations into how mental health/health care systems currently function and how they may not be conducive to the use and/or implementation of routine outcome monitoring tools/management systems. The remaining group of questions that asked specifically about routine outcome monitoring tools/management systems attempted to uncover how therapists are currently using ROM in their day-to-day clinical practices.

4.3 Measures

4.3.1 Basic Demographic Information

Participants were asked to report their age, ethnicity, gender, primary language, and theoretical orientation in order to provide basic descriptive information about the sample.

4.3.2 Training Background

Participants were asked about the type of degree they obtained and if they were required to use outcome monitoring tools/management systems during and/or after their graduate training.

4.3.3 Current Practice Setting and Function

Participants were asked about: 1) the type of clinical setting; 2) rural versus urban practice location; 3) number of therapists (including themselves) providing services at their location; 4) approximate total case load; 5) approximate number of patients seen in a day; 6) approximate number of hours of supervision received each week; 7) approximate number of total years seeing patients; and 8) approximate amount of money, if any, participants are willing to spend on routine outcome monitoring/management systems each year.

4.3.4 Current Utilization of Routine Outcome Monitoring/Management Systems

Participants were asked specific questions regarding the use of routine outcome monitoring and if they use the results as a component of clinical supervision: 1) Do you engage in routine outcome monitoring as part of your day-to-day practice of psychotherapy? If yes, why? If no, why not? 2) If you do engage in routine outcome monitoring, do you discuss outcome results during supervision with your supervisor? If yes, why? If no, why not?

4.3.5 Self-Reflection and Insight Scale (SRIS)

The SRIS (Grant, Franklin & Langford, 2002) was developed to measure an individual's level of self-consciousness. The SRIS captures the complex relationship between self-reflection and insight in hopes of better understanding sociocognitve and metacognitive processes central to purposeful individual change (Grant, Franklin & Langford, 2002). It is a 20 item self-report measure that asks respondents to rate their experience of self-reflection and insight on a 6-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree." Factor analysis of the SRIS confirmed the presence of two factors: Self-Reflection (SRIS-SR) and Insight (SRIS-IN). The Cronbach's alpha coefficient for SRIS-SR is .91 and .87 for SRIS-IS (Grant, Franklin & Langford, 2002). Reliability for the SRIS-SR is .77 ($p < .001$) and .78 ($p < .001$) for SRIS-IS (Grant, Franklin & Langford, 2002).

4.3.6 Self-Assessment Bias

Self-Assessment bias has been well documented across a variety of professional fields (Walfish, McAlister, O'Donnell & Lambert, 2012; Meyer, 1980). Thus, participants were assessed for Self-Assessment Bias or the tendency to perceive one's skills, expertise,

and knowledge as superior to others (Dunning, Heath & Suls, 2004; Elaad, 2003). To capture this phenomenon, participants were asked two questions published in a study conducted by Walfish, McAlister, O'Donnell and Lambert (2012). Question 1: Compared to other mental health professionals within your field (similar credentials), how would you rate your overall clinical skills and performance in terms of a percentile (0-100%, e.g., 25% = below average, 50% = average, 75% = above average)? Question 2: What percentage (0-100%) of your patients gets better (i.e., experience significant symptom reduction during treatment? What percentage stays the same? What percentage gets worse?)

4.4 Analysis

4.4.1 Quantitative Analysis

All statistical calculations and analyses were conducted using Statistical Package for the Social Sciences (SPSS) software. Descriptive statistics were calculated before inferential procedures. As such, Means (*M*) and Standard Deviations (*SD*) were calculated to determine averages among the sample (Warner, 2013). Chi square tests were used to determine strength of relationships between the variables contained within the study (Warner, 2013). Additionally, a one-way analysis of variance (ANOVA) was conducted to compare means between groups within the data set (Warner, 2013). Statistical significance was set at $p < .05$. 95% confidence intervals (CI) were calculated and reported. Every effort was taken to reduce the likelihood of Type I and Type II errors. Given the number of analyses, family-wise error rate were used per-comparison of alpha levels (Warner, 2013). Effect sizes were calculated and based on Cohen's (1988) suggested interpretation, which indicates .10, or less is small, .30 is medium, and .50 or greater is a large effect size.

When considering analysis of variance (ANOVA) tests, Cohen's (1992) power analysis suggest that researchers aim for an *N* of approximately 64 (per group) when comparing two groups, 52 when comparing three groups, 45 when comparing four groups, 39 when comparing five groups, 35 when comparing six groups, and 32 when comparing seven groups. These sample sizes are based on an alpha level of .05 and assumed medium effect size. In regards to correlational analyses, Cohen's (1992) power analysis suggest that researchers should obtain an *N* of approximately 85 where correlations are reported. This suggested sample size is based on an alpha of .05 and assumed medium effect size. The following section restates each of the primary hypotheses of the study (italics) and the proposed statistical calculation(s) and/or analysis:

Hypothesis 1a: *On average, most participants will choose not to utilize routine outcome monitoring tools/management systems*. Means (*M*) and Standard Deviations (*SD*) were calculated in order to determine the average amount of routine outcome monitoring/management systems use, or non-use, within the sample.

Hypothesis 1b: *None of the reported demographic variables will produce a statistically significant differences or relationships in regards to the use of ROM tools/management systems*. A follow up chi-square test of association were conducted to determine significant differences when both the independent and dependent variables are categorical. Individual T-tests were conducted to determine significant relationships for the remaining variables.

Hypothesis 1c: *General therapist characteristics, specifically in regards to training background, will not produce a statistically significant relationship regarding the use/non-use of ROM tools/management systems*. A follow up chi-square test of association was conducted to determine significant differences when both the independent and dependent variables are categorical. Individual T-tests were conducted to determine significant relationships for the remaining variables.

Hypothesis 1d: *Systemic influences will not produce statistically significant relationships regarding the use/non-use of ROM tools/management systems*. A follow up chi-square test of association was conducted to determine significant differences when both the independent and dependent variables are categorical. Individual T-tests were conducted to determine significant relationships for the remaining variables.

Hypothesis 2a: *On average, within the group of therapists who endorsed the use of ROM tools/management systems, most will choose not to incorporate feedback results into the clinical supervision process*. Means (*M*) and Standard Deviations (*SD*) were calculated in order to determine the average amount of therapists who choose to discuss ROM results during clinical supervision.

Hypothesis 2b: *Within the group of therapists who endorsed the use of ROM tools/management systems, none of the reported demographic variables will produce a statistically significant difference or relationship regarding the discussion of ROM feedback results in the clinical supervision process.* A chi-square test of association was conducted to determine significant differences when both the independent and dependent variables are

categorical. Follow up Individual T-tests were conducted to determine significant relationships for the remaining variables.

Hypothesis 2c: *General therapist characteristics, specifically in regards to training background, would not produce a statistically significant relationship in regards to the incorporation of ROM feedback results into the clinical supervision process*. A follow up chi-square test of association was conducted to determine significant differences when both the independent and dependent variables are categorical. Individual T-tests were conducted to determine significant relationships for the remaining variables.

Hypothesis 2d: *Systemic influences would not produce statistically significant relationships regarding the discussion of ROM feedback during the process of clinical supervision*. A chi-square test of association was conducted to determine significant differences when both the independent and dependent variables are categorical. Follow up Individual T-tests were conducted to determine significant relationships for the remaining variables.

Hypothesis 3: *Therapists who choose to utilize ROM tools/management systems will display higher levels of self-reflection and insight (as measured by the SRIS).* Individual T-tests were conducted to determine statistically significant differences.

Hypothesis 4: *Therapists who discuss ROM feedback within the process of clinical supervision will display higher levels of self-reflection and insight (as measured by the SRIS).* Individual T-tests were conducted to determine statistically significant differences.

Hypothesis 5a: *Therapists will rate themselves as "above average clinicians" when compared to their counterparts, i.e., they will demonstrate a higher level of self-assessment bias.* Means (*M*) and Standard Deviations (*SD*) were calculated in order to determine the average number of therapists who choose to discuss ROM results during clinical supervision. A follow up One-way analysis of variance (ANOVA) was conducted to in order to determine whether or not there is a statistically significant difference in levels of self-assessment bias and therapist credential.

Hypothesis 5b: *Participants will, on average, overestimate the percentage of their patients that improve as a result of being engaged in treatment, i.e., they will demonstrate a higher level of positive self-assessment bias regarding patient improvement.* Means (*M*) and Standard Deviations (*SD*) were calculated in order to determine the average number of therapists who choose to discuss ROM results during clinical supervision. A follow up One-way analysis of variance (ANOVA) was conducted to in order to determine whether or not there is a statistically significant difference in levels of self-assessment bias and therapist credential.

Hypothesis 5c: *Participants will, on average, underestimate the percentage of their patients that remain the same as a result of being engaged in treatment.* Means (*M*) and Standard Deviations (*SD*) were calculated in order to determine the average number of therapists who choose to discuss ROM results during clinical supervision. A follow up One-way analysis of variance (ANOVA) was conducted to in order to determine whether or not there is a statistically significant difference in levels of self-assessment bias and therapist credential.

4.4.2 Qualitative analysis: Phenomenological contextualism

Phenomenological contextualism was utilized to examine the open-ended questions included within the survey (Stolorow, 2013). Phenomenological contextualism is clinical and interpretive rather than experimental and deductive (Atwood & Stolorow, 1993). It is phenomenological in that it hopes to uncover and explore the significant aspects of a participant's lived experience, and it is contextual in that it assumes the salient material is derived from relational situations (e.g. therapy, clinical supervision, etc.). Therefore, the phenomenological contextualism approach is able to examine the diverse subjectivities of participants, while also hoping to embrace the full range of their experiences as it relates to the research question. As such, the data collected through the open-ended questions was explored from a stance of curiosity that attempted to capture each participant's "lived experience," while simultaneously acknowledging the subjectivity of the researcher as well. In short, qualitative analysis, from a phenomenological contextual approach, is an iterative, meaning making process that will inherently involve the subjectivity of both the participant and the researcher. Thus, phenomenological contextualism should be understood as a "stance" toward exploring and understanding data, versus a set of techniques being imposed upon a data set.

From a phenomenological stance, Bazeley (2013) suggests that the data be analyzed through the exploration of thematic statements. The guidelines that follow are adapted from Bazeley's (2013) suggested approach toward phenomenological analysis. First, the data set is organized by general statements, or perceived "natural meaning units" (Bazely, 2013, p. 195). Second, the data set is examined for central themes arising out of the meaning units. Third, the central theme of each thematic statement is interrogated in

regards to the study's research question. Fourth, each of the thematic statements is clustered together in order to develop a comprehensive understanding of the essential themes, which hopefully capture the phenomenon in question (e.g., Why do therapists choose to utilize routine outcome measures?). Finally, clusters are examined and integrated to produce a description of the investigated topic that is rooted in the context of the participants. In doing so, the data set becomes a shared experience between the researchers and the participants. Smith, Flowers, and Larkin (2009) describe the phenomenological approach as a "double hermeneutic because the researcher is trying to make sense of the participant trying to make sense of what is happening to [her or himself]" (p. 3). Phenomenological contextualism both honors and acknowledges this process.

Chapter 5 Results

5.1 Quantitative Results

5.1.1 Preliminary Analyses

Eligibility and Recruitment. A total of 326 responses were collected from the online survey. Seven participants were deleted due to eligibility requirements (i.e. participants who indicated that were not seeing patients and not receiving clinical supervision). One participant was excluded based on a failure to complete any of the items on the SRIS measure included in the survey. Thus, a total of 318 participants were included in the final data analysis process. 160 participants (44.2%) stated that they were seeing at least one patient but not receiving clinical supervision. 156 participants (43.1%) stated that they were seeing at least one patient and receiving clinical supervision. Two participants (0.6%) stated that they were receiving clinical supervision but not seeing any patients. Participants were recruited through email listservs associated with various divisions of the American Psychological Association (APA) and other online directories (e.g., Psychology Today) that listed participant contact information. Snowball sampling was also employed, as participants were encouraged to forward the recruitment email onto other therapists. No incentive was provided for participation in the study.

Missing Values and Imputation. The data set was screened for missing values. Survey items regarding "case load," "supervision hours," and "number of years practicing" had the highest rate of non-responses. Less than 10 participants failed to provide complete entries. However, failure to answer these items did not result in exclusion from the study. It was determined that these participants had completed the majority of the survey items and that the overall amount of missing values in regards to these items would not have a significant

impact on the planned statistical analyses. However, this rationale was not applied to missing values regarding the SRIS scale. These missing values were determined critical to the planned analyses and were replaced with the mean score for each item. This method has been empirically supported in earlier studies utilizing the SRIS scale (Stein & Grant, 2014). A total of 21 missing values, across the entire data set, were replaced utilizing this process.

Demographic Information. Gender: The sample was comprised of mainly individuals who gender-identified as female. 245 participants (77.04%) of the total sample identified as female in the demographics section of the online survey, while 68 participants (21.38%) identified as male. 3 participants (0.9%) identified as "Other," which included qualitative descriptions such as, "Non-binary gender, Genderqueer, etc." and 2 participants (0.6%) selected "Prefer Not to Answer." *Age:* Participant ages ranged from 23 – 77 years old, (M=41.36, SD=12.25), with the mean age being approximately 41 years old. *Ethnicity:* 275 participants (86.48%) identified as White/Caucasian, 19 participants (6.0%) identified with two or more ethnicities, 7 participants (1.9%) identified as Black/African American, 6 participants (1.89%) identified as Asian or Pacific Islander, another 6 participants (1.89%) identified as Hispanic/Latino, and 1 participant (0.3%) identified as Native American/Alaskan Native. The remaining participants consisted of 3 (0.9%) who chose "Prefer Not to Answer" and 1 participant (0.3%) who selected "Other" in regards to ethnicity. *Primary Language:* 312 participants (98.11%) selected English as their primary language. 2 participants (0.63%) selected Spanish, 1 participant (0.3%) selected Polish, 1 (0.3%) selected Khmer, 1 (0.3%) selected Swedish, and 1 participant (0.3%) indicated fluency in both English and Spanish. *Training Background:* 132 participants (41.51%)

completed either an MS/MA. It should be noted, that participants who stated that they had completed other types of Master's level of training, apart from an MSW or MFT, were subsequently included in this category (e.g. M.Ed., MC, etc.). 63 participants (19.81%) completed an MSW, 47 participants (14.78%) completed a Ph.D., 39 participants (12.26%) completed a Psy.D., 22 participants (6.92%) completed an MFT, 1 participant (0.31%) completed an Ed.D., and 1 participant (0.31%) completed an M.D./D.O. 13 participants (4.10%) either chose not to respond or were coded as "Other." Participants were coded as "Other" based on responses that suggested they had not completed any training above a Bachelor's degree, and/or they were in the process of completing a higher level of training but gave no indication of degree(s) already granted (e.g. "2nd year Ph.D. student). *Theoretical Orientation:* A variety of theoretical orientations were represented within the sample. 120 participants (33.1%) selected Integrative/Holistic/Eclectic, 97 participants (26.8%) selected Behavioral (Cognitive-Behavioral), 44 participants (12.2%) selected Humanistic (Client-Centered, Gestalt, Existential), 28 participants (7.7%) selected Psychoanalytic/Psychodynamic, and 12 participants (3.3%) selected Cognitive as their theoretical orientation. 17 participants (4.7%) selected "Other," and based on the data set the majority of those participants indicated working from a "systems" or an "interpersonal" theoretical framework. *Clinical Setting:* 221 participants (69.50%) indicated that they are working in a Private Practice setting. 30 participants (9.43%) specified Community and Mental Health Center, 16 participants (5.03%) specified working in a University setting, 9 participants (2.83%) specified a Hospital Clinic, 5 participants (1.6%) specified a Government Agency, 4 (1.30%) specified an In-patient setting, another 4 (1.30%) specified a Substance Abuse Treatment Center, and an additional 4 participants specified (1.30%)

working at a Veteran's Affairs (VA) clinic or for the Department of Defense (DOD). Only, 2 participants (0.63%) specified a Correctional setting and 1 participant (0.3%) left the field blank. Finally, 22 participants (6.92%) chose "Other" in regards to their clinic setting, which most commonly reflected employment at multiple sites (e.g. private practice and a community mental health center, etc.). 1 participant (0.31%) chose not to answer.

Location: Participants were asked to indicate whether or not they are providing services in either an urban or rural location. 242 participants (76.10%) endorsed an urban location, 74 (23.27%) endorsed a rural location, and 2 participants (0.63%) chose not to answer. Table 1 represents the descriptive statistics (basic demographic information) of the study sample.

Table 1

Descriptive Analysis

Characteristic	Participants (*n* = 318)			
	n	%	*M*	*SD*
Age			41.36	12.25
Gender				
Male	68	21.38		
Female	245	77.04		
Prefer Not to Answer	2	0.63		
Other	3	0.94		
Ethnicity				
White/Caucasian	275	86.48		
Two or More Ethnicities	19	6.0		
Black/African American	7	2.20		
Asian or Pacific Islander	6	1.89		
Hispanic/Latino	6	1.89		
Native American/Alaskan Native	1	0.31		
Prefer Not to Answer	3	0.94		
Other	1	0.31		
Primary Language				
English	312	98.11		
Spanish	2	0.63		
Polish	1	0.31		
Khmer	1	0.31		
Swedish	1	0.31		
English and Spanish	1	0.31		
Training Background				
MS/MA	132	41.51		
MSW	63	19.81		
Ph.D.	47	14.78		
Psy.D.	39	12.26		
MFT	22	6.92		
Ed.D.	1	0.31		
M.D./D.O.	1	0.31		
Other	13	4.10		
Theoretical Orientation				
Integrative/Holistic/Eclectic	120	37.74		
Behavioral (Cognitive-Behavioral)	97	30.5		
Humanistic (Client-Centered, Gestalt, Existential)	44	13.84		
Psychoanalytic/Psychodynamic	28	8.81		
Cognitive	12	3.77		
Other	17	5.35		

Descriptive Analysis (continued)

Characteristic	Participants (*n* = 318)			
	n	%	*M*	*SD*
Clinical Setting				
Private Practice	221	69.50		
Community Mental Health Center	30	9.43		
University	16	5.03		
Hospital Clinic	9	2.83		
Government Agency	5	1.60		
In-patient	4	1.30		
Substance Abuse Treatment Center	4	1.30		
VA/DOD	4	1.30		
Correctional	2	0.63		
Other	22	6.92		
Did Not Answer	1	0.31		
Location				
Urban	242	76.10		
Rural	74	23.27		
Blank	2	0.63		

5.1.2 Sample Representativeness

In an effort to better understand the representativeness of the current sample it was compared to multiple different published studies examining therapist demographic variables. The first comparison sample was derived from a study published in 2010 by Cook, Biyanova, Elhai, Schnurr, and Coyne. Their study, solicited participants to complete a Web-based survey and included 2,156 North American therapists (U.S. and Canada; Cook, Biyanova, Elhai, Schnurr & Coyne, 2010). While they did not examine all of the same demographic characteristics as the current sample, the variables that did overlap were ethnicity, age, training background (type of licensure), and clinical setting. Their sample was primarily compromised of therapists who identified as "White" (92%), gender identified as female (77%), reported a mean age of 59.30 (*SD*=9.89), and had an average of

15.26 (*SD*=9.86) years of clinical experience (Cook, Biyanova, Elhai, Schnurr & Coyne, 2010). Their sample appears to be similar to the present sample in regards to ethnicity and gender identity where the predominant ethnicity was identified as "White/Caucasian" (86.5%) and gender as female (77%). However, the Cook et al., 2010 sample was, on average, older than the present sample, which yielded a mean age of 41.36 (*SD*=12.25) and reported more years of clinical experience compared to the present sample, which, on average, was 10.30 years (*SD*=9.39). The Cook et al., study sample included social workers (36%), professional counselors (23%), psychologists (17%), marriage and family therapists (17%), and Others (7%; drug/alcohol and pastoral counselors). This differed slightly from the licensure makeup of the current sample, which included social workers (20%), professional counselors (42%), psychologists (27%), and marriage and family therapists (7%). Although the specific percentages of master's level degree/credential differed from the present sample, it should be highlighted that side-by-side comparisons of master's versus doctoral level therapists reveal more similar findings. For example, the Cook et al., 2010 study is comprised of 76% master's level and 17% doctoral level therapists, whereas the current sample is 69% master's level and 27% doctoral level therapists. The Cook et al., 2010 study sample reported that 52% of respondents worked in private practice settings and 21% worked in institutionalized settings. The current sample was similar in that the majority of participants also worked in private practice settings (70%) and the minority of the participants reported working in institutionalized settings (23%).

In summary, the Cook et al., 2010 study revealed that when examining North American therapist characteristics, the majority of the respondents were White/Caucasian,

females, approximately 59 years old, with a master's level credential, and have worked in private practice settings, for an average of about 15 years. Similar to the present sample, which found that the majority of respondents were also White/Caucasian, females, with a master's level credential, and work in private practice settings. The two main differences between the two samples arise when examining the mean age (59 vs. 41) and average length of clinical experience (15 vs. 10). It is likely that these differences stem from the fact that the present sample includes both unlicensed and trainees, which are typically younger and have less clinical experience.

While the Cook et al., 2010 study provided representative estimates based on a North American sample of therapists, three other samples provided specific group comparisons based on level of credential. The first comparison group utilized was derived from the 2015 APA Survey of Psychology Health Service Providers. This report provides an overview of the demographic, educational characteristics, employment settings and other therapist related variables as they pertain to licensed health service psychologists throughout the United States (U.S.; APA, 2016). It should be noted that the APA survey specifically targeted licensed doctoral level psychologists in the U.S. and successfully recruited 5,325 individuals, which yielded a response rate of 14.5% (APA, 2016).

The 2015 APA Survey of Health Service Providers revealed that the majority of their respondents identified as White/Caucasian (87.8%), female (59.2%), and were, on average, 55.7 years old. Additionally, the sample revealed that 45% of their respondents work in Private Practice settings, 43% work in Institutionalized settings (e.g., Hospital, Education, etc.), and 12% work in "Other" types of settings. In terms, of specific type of doctoral degree, the 2015 APA survey indicated that 78% of their respondents had earned a Ph.D.,

19% had earned a Psy.D., and 3% had earned an Ed.D. Overall, the overlapping demographic information collected for the present study revealed similar findings. When only examining the data from the doctoral level respondents, findings suggest that the majority of respondents identified as White/Caucasian (85.71%) and female (62%). Compared to the 2015 APA Survey, the present sample had a higher number of doctoral level respondents indicating that they work in Private Practice settings (64 vs. 45%) and the average age was about 13 years younger (43 vs. 56). The 2015 APA Survey also featured a higher amount of Ph.D. degrees (78 vs. 55%), fewer Psy.D. degrees (19 vs. 45%), and slightly more Ed.D. degrees (3 vs. 1%). In summary, it appears that when comparing the doctoral level therapists to the doctoral level therapists in the present sample, similarities are found in regards to ethnicity (White/Caucasian), gender identification (female), clinical setting (Private Practice), and type of degree earned (Ph.D.). Detailed findings can be found in Table 2.

Table 2

Descriptive Analysis: Doctoral Level Therapists

Characteristic					*M*	*SD*	*n*
ROM Day to Day Practice	Clinical Setting	Credential	Gender	Ethnicity			
No	Private Practice	Doctoral Level	Male	White/Caucasian	57.1	11.79	10
			Female	White/Caucasian	39.78	11.09	18
				Asian or Pacific Islander	34	.	1
				Black or African American	32	.	1
				Two or more ethnicities	35	.	1
				Total	38.9	10.46	21
			Total	White/Caucasian	45.96	13.97	28
				Asian or Pacific Islander	34	.	1
				Black or African American	32	.	1
				Two or more ethnicities	35	.	1
				Total	44.77	13.76	31
No	Institutionalized Setting	Doctoral Level	Male	White/Caucasian	41	.	1
				Asian or Pacific Islander	29.5	2.12	2
				Total	33.33	6.81	3
			Female	White/Caucasian	35.83	7.65	6
				Total	35.83	7.65	6
			Total	White/Caucasian	36.57	7.25	7
				Asian or Pacific Islander	29.5	2.12	2
				Total	35	7.05	9

Descriptive Analysis: Doctoral Level Therapists (continued)

Characteristic		
ROM Day to Day Practice	Clinical Setting	Credential
Yes	Private Practice	Doctoral Level
Yes	Institutionalized Setting	Doctoral Level

		M	*SD*	*n*
Gender	Ethnicity			
Male	White/Caucasian	55.44	15.14	9
Female	White/Caucasian	37.82	9.79	11
	Two or more ethnicities	51	.	1
	Total	38.92	10.08	12
Prefer not answer/Other	White/Caucasian	66	.	1
	Two or more ethnicities	35	.	1
	Total	50.5	21.92	2
Total	White/Caucasian	46.71	15.36	21
	Two or more ethnicities	43	11.31	2
	Total	46.39	14.88	23
Male	White/Caucasian	44.29	13.28	7
	Black or African American	40	.	1
	Total	43.75	12.38	8
Female	White/Caucasian	36.78	11.13	9
	Asian or Pacific Islander	29.5	0.71	2
	Black or African American	29	.	1
	Two or more ethnicities	32	.	1
	Total	34.69	9.68	13
Total	White/Caucasian	40.06	12.30	16
	Asian or Pacific Islander	29.5	0.71	2
	Black or African American	34.5	7.78	2
	Two or more ethnicities	32	.	1

Descriptive Analysis: Doctoral Level Therapists (continued)

	Total	38.14	11.41	21

Similar to the 2015 APA Survey of Health Service Providers, which specifically examined the Health Service Psychologists, the American Association for Marriage and Family Therapy (AAMFT) conducted their own survey of their members in 2011 and published their findings in 2012. Although the survey included 2,890 marriage and family therapists actively in engaged in clinical work, it was limited in scope regarding demographic variables as it only asked about ethnicity identification. The only other overlapping variable with the present sample inquired about the type of primary employment/clinical settings where the respondents worked.

The AAMFT Member Survey (Todd & Holden, 2012) reported that 90.6% of their respondents identified as White, Non-Hispanic, 49% work in private practice settings, and 40% work in institutionalized settings. Compared to the AAMFT Member Survey, the present sample had the exact same percentage of respondents identifying White as their ethnicity (91%) but featured a higher amount of respondents in private practice (91 vs. 49%%), and fewer respondents in institutionalized settings (49 vs. 9%). Detailed findings can be found in Table 3

Table 3

Descriptive Analysis: Marriage and Family Therapists

Characteristic			*n*
ROM Day to Day Practice	Clinical Setting	Ethnicity	
No	Private Practice	White/Caucasian	12
		Asian or Pacific Islander	.
		Black or African American	.
		Two or more ethnicities	2
		Total	14

Descriptive Analysis: Marriage and Family Therapists (continued)

Characteristic			*n*
ROM Day to Day Practice	Clinical Setting	Ethnicity	
No	Institutionalized Setting	White/Caucasian	2
		Asian or Pacific Islander Ethnicity	.
		Black or African American	.
		Two or more ethnicities	.
		Total	2
Yes	Private Practice	White/Caucasian	6
		Asian or Pacific Islander	.
		Black or African American	.
		Two or more ethnicities	.
		Total	6
Yes	Institutionalized Setting	n/a	n/a

When considering that both of the samples provided by the APA and AAMFT, it appears as if neither professional organization followed a standardized procedure in regards to the type of data that what was collected, specific comparisons, and presentation of findings. Moreover, this lack of a standardized method and format of presenting membership information was further illustrated in a national study of licensed social workers (Whitaker, Weismiller & Clark, 2006). In fact, the study published in 2006 by the National Association of Social Workers (NASW) made comparisons even more difficult because their sample included licensed social workers that may or may not have earned a master's degree and may or may not have been providing psychotherapy services. Thus, it appears when comparing

across professional organizations, based on the lack of consistency regarding data collection and reporting methods, estimates of sample representativeness becomes extremely difficult. Cook et al., 2010 reference this fact in their article where they state,

> "While there are numbers of well-known professional organizations such as the American Psychological Association, the National Association of Social Workers, and the American Association of Marriage and Family Therapy, there appears to be no joint organization currently serving the interests of a broad array of psychotherapists in their entirety" (p. 5).

Accordingly, the lack of a "joint organization" makes it difficult to make comparisons of therapists and estimate representativeness between samples (Cook et al., 2010, p. 5). Furthermore, Cook and colleagues (2010) suggest that their North American sample of therapists "is likely to be more representative of the mental health workforce as a whole" than other samples derived from a specific professional organization/type of credential, or that might be limited by their geographical location (p. 5). Thus, based on the findings of Cook et al., 2010 and after reviewing the (lack of) data provided by both the APA, AAMFT, and the NASW it appears as if the best comparison for estimates of representativeness should be based on a sample that does not discriminate by a particular demographic variable (e.g., Type of Degree/Credential, etc.). Therefore, when considering the published findings and recommendations of Cook et al., 2010, it seems reasonable to assume that the previously discussed comparisons between the Cook et al., 2010 sample and the present sample will yield the best estimates of representativeness. The sample comparisons are provided in Table 4. Additionally, Table 5 is based on the demographic variables discussed within the Cook et al., 2010 sample and ROM use

within the present sample. It is being provided to display a more detailed representation of the relevant demographic variables.

Table 4

Descriptive Analysis: Sample Comparison with Cook et al., 2010

Sample	Characteristic							
				Credential		Clinical Setting		
	Gender	Ethnicity	Avg. Age	Master's	Doctorate	Private Practice	Institutionalized	Avg. Years in Practice
Cook et. al., 2010	Female (77%)	White/Caucasian (92%)	59	76%	17%	52%	21%	15
Present Sample. 2017	Female (77%)	White/Caucasian (87%)	41	69%	27%	70%	23%	10

Table 5

Descriptive Analysis: Grouped by Relevant Categories

Characteristic			
ROM Use/Non-use	Setting	Credential	Gender
No	Private Practice	Doctoral	Male
			Female
		Master's	Male
			Female
			No Answer/Other
		Other	Male
			Female
	Institutionalized	Doctoral	Male
			Female
		Master's	Male
			Female
		Other	Female
	Other	Doctoral	Female
		Master's	Male
			Female
		Other	Female

		Age	
Ethnicity	*n*	*M*	*SD*
White/Caucasian	10	57.10	11.79
White/Caucasian	18	39.78	11.09
Non-White/Multiracial	3	33.67	1.53
White/Caucasian	18	40.00	7.35
Non-White/Multiracial	1	39.00	.
White/Caucasian	84	41.24	11.36
Non-White/Multiracial	12	42.25	14.93
White/Caucasian	2	33.50	2.12
White/Caucasian	1	59.00	.
White/Caucasian	1	69.00	.
Non-White/Multiracial	2	38.50	12.02
Total	152	42.04	11.93
White/Caucasian	1	41.00	.
Non-White/Multiracial	2	29.50	2.12
White/Caucasian	6	35.83	7.65
White/Caucasian	1	25.00	.
Non-White/Multiracial	1	53.00	.
White/Caucasian	13	37.00	10.68
Non-White/Multiracial	3	38.67	10.12
White/Caucasian	1	26.00	.
Non-White/Multiracial	1	23.00	.
Total	29	35.83	9.81
White/Caucasian	2	50.50	27.58
Non-White/Multiracial	1	32.00	.
White/Caucasian	5	40.60	12.48
Non-White/Multiracial	2	51.50	19.09
Non-White/Multiracial	1	24.00	.

Descriptive Analysis: Grouped by Relevant Categories (continued)

Characteristic			
ROM Use/Non-use	Setting	Credential	Gender
Yes	Private Practice	Doctoral	Male
			Female
			No Answer/Other
		Master's	Male
			Female
			No Answer/Other
		Other	Female
	Institutionalized	Doctoral	Male
			Female
		Master's	Male
			Female
		Other	Female
	Other	Doctoral	Male
			Female
		Master's	Male

		Age	
Ethnicity	*n*	*M*	*SD*
White/Caucasian	9	55.44	15.14
White/Caucasian	11	37.82	9.79
Non-White/Multiracial	1	51.00	.
White/Caucasian	1	66.00	.
Non-White/Multiracial	1	35.00	.
White/Caucasian	8	50.13	6.42
White/Caucasian	34	43.85	11.79
Non-White/Multiracial	1	41.00	.
Non-White/Multiracial	1	30.00	.
White/Caucasian	1	56.00	.
Total	68	45.38	12.46
White/Caucasian	7	44.29	13.28
Non-White/Multiracial	1	40.00	.
White/Caucasian	9	36.78	11.13
Non-White/Multiracial	4	30.00	1.41
White/Caucasian	3	43.33	17.62
Non-White/Multiracial	1	30.00	.
White/Caucasian	13	34.92	11.26
Non-White/Multiracial	1	30.00	.
White/Caucasian	5	33.00	8.89
Total	44	36.59	11.24
White/Caucasian	1	69.00	.
White/Caucasian	1	50.00	.
White/Caucasian	1	34.00	.
Non-White/Multiracial	1	28.00	.

Descriptive Analysis: Grouped by Relevant Categories (continued)

Characteristic					Age		
ROM Use/Non-use	Setting	Credential	Gender	Ethnicity	*n*	*M*	*SD*
			Female	White/Caucasian	6	39.67	10.69
				Non-White/Multiracial	2	33.50	2.12
				Total	12	40.50	12.72

5.1.3 Statistical Analyses

Due to the exploratory nature of the study, multiple hypotheses were proposed and tested in regards to the current data set. In turn, multiple statistical analyses were planned and conducted in hopes of determining significant findings. However, while multiple analyses match the research questions and study design, they also increased the chances of committing a Type I error. In order to combat the likelihood of a false positive, a family wise error rate was determined. For the current data set, it was decided that the family wise error rate would be applied by hypothesis. This type of correction was based on the theoretical premise that each hypothesis is content-specific and, therefore, the alpha level should only apply to that content. Thus, the generally accepted alpha level of $p < .05$ was divided by the total number of statistical tests that are associated with each hypothesis. Each adjusted alpha level will be discussed in the section dedicated to each separate hypothesis.

Another important point in regards to the type of statistical analyses should be discussed. Due to the type of research questions and collected data, multiple chi square tests of association were conducted. This type of statistical test typically assumes an independence of observations and cell frequencies of at least 5. However, according to Yates, Moore, and McCabe (1999) chi square test of association results may be interpreted if: a) "Each observation is independent of all others; and b) No more than 20% of the expected counts are less than 5 and all individual expected counts are 1 or greater" (p. 734). Based on these guidelines, the majority of the following chi square analyses were able to be interpreted. However,

some variables still violated the proposed assumptions of Yates and colleagues. This occurred if the variable in question could not be collapsed or reduced into categories that would provide high enough cell frequency based on the limitations of participant responses. In other words, participants did not endorse certain items with a high enough frequency to technically meet the assumptions of the statistical test (i.e., Clinical Setting). Likewise, variables that were determined by the researcher to capture important cultural characteristics (i.e., ethnicity) were also not combined into categories to fit the assumptions of the statistical test. This was decided upon as a means to balance the findings of qualitative methodologies with the cultural context of participants, which are often overlooked in strict statistical procedures. In short, there will be some statistical analyses that technically violate the assumptions of the proposed test that are still being reported and interpreted. However, it was determined that the results, when interpreted with caution combined with the adjusted alpha level, can still provide meaningful information regarding the research questions.

Hypothesis 1a: *This hypothesis stated that, on average, most participants would choose not to utilize routine outcome monitoring (ROM) tools/management systems.*

The descriptive statistics results suggested an inability to reject the planned hypothesis (null hypothesis). Of the total sample, 192 participants (60.0%) indicated that they do not utilize ROM tools/management systems as part of their day-to-day practice of psychotherapy, while 124 participants (38.99%) indicated that they do utilize ROM tools/management systems. 2 participants (0.6%) chose not to answer this particular questions when completing the survey.

Hypothesis 1b: *This hypothesis stated that none of the reported demographic variables would produce a statistically significant difference or relationship in regards to the use of routine outcome monitoring (ROM) tools/management systems.*

Hypothesis 1b-1d consisted of 15 different statistical tests. Thus, the alpha rate has been adjusted to $p < 0.003$ (0.05/15). Data analyses suggested an inability to reject the null hypothesis. The following are the results of the statistical analyses conducted to detect significant differences or relationships between a participant's decision to use ROM tools/management systems and the demographic variables of age, gender, ethnicity, primary language, and theoretical orientation.

Age. An independent samples t-test was conducted to compare participant age for those who indicated "No" to the use of ROM tools/management systems, M = 41.10, SD = 12.03, and participant age for those who indicated "Yes" to the use of ROM tools/management systems, M = 41.79, SD = 12.66, 95% CI [-3.47, 2.01]. A non-significant difference was found, $t(314)$= -.485, p = .628. The difference represents a small effect size (d = .20) indicating that on average, there is no statistical difference in age between participants who choose to utilize ROM tools/management systems and those who do not.

Gender. A chi square test of association was conducted to test the association between a participant's decision to utilize ROM tools/management systems and gender. Expected cell frequencies were examined to see whether there were any expected frequencies less than 5; 2 (33.3%) cells have expected count less than 5. The minimum expected count is 1.96. Of the 243 participants who gender-identified as female, 89 reported using ROM tools/management systems and 154 did not. Of

the 68 participants who gendered-identified as male, 32 reported using ROM tools/management systems, while 36 did not. 5 participants selected "Prefer Not to Answer" or "Other," and were coded together to meet the assumptions of the statistical test. 3 participants reported the use of ROM tools/management systems and 2 participants denied ROM use. A phi coefficient was calculated to assess the strength of this relationship: $\Phi = .103$; [-0.01, 0.21]. This corresponds to a small effect size. This was not a statistically significant association: $\chi^2(2) = 3.34$, $p = .188$. The nature of the relationship was that gender identification did not result in a statistically-significantly higher proportion of ROM tools/management systems users versus non-users. It should be noted that having 2 cells with an expected count of less than 5, technically violates the assumptions of the chi square test, but it was determined to be unavoidable by the researchers. Results are described in Table 6.

Table 6

Results of Chi-square Test and Gender Identity for ROM Users vs. Non-users

Reported ROM Use	Gender Identification		
	Male	Female	Prefer not to Answer/Other
No	36 (52.94%)	154 (63.37%)	2 (40%)
Yes	32 (47.10%)	89 (36.63%)	3 (60%)

Note. χ^2 =3.34*, df=2, Numbers in parentheses indicate column percentages.
*p>.05

Ethnicity. A chi square test of association was conducted to test the association between a participant's decision to utilize ROM tools/management systems and ethnicity. Expected cell frequencies were examined to see whether there were any expected frequencies less than 5; 12 cells (75.0%) had an expected count less than 5. The minimum expected count was 0.39. Of the 273 participants

who identified as White/Caucasian, 110 participants reported using ROM tools/management systems and 163 did not. Of the 19 participants who identified as "Two or More Ethnicities," 9 participants reported using ROM tools/management systems, while 10 did not. Of the 7 participants who identified as Black/African American, 2 participants reported using ROM tools/management systems, while 5 did not. Of the 6 participants who identified as Asian/Pacific Islander, 2 participants reported using ROM tools/management systems, while 4 did not. Of the 6 participants who identified as Hispanic/Latino, 1 participant reported using ROM tools/management systems, while 5 did not. Of the 3 participants selected "Prefer Not to Answer," all three reported that they do not use ROM tools/management systems. The participant who identified as American Indian/Alaskan Native denied using ROM tools/management systems. Likewise, the participant who identified as "Other" in regards to ethnicity did not report using ROM tools/management systems. A phi coefficient was calculated to assess the strength of this relationship: $\Phi = .133$; [0.20, 0.24]. This corresponds to a small effect size. This was not a statistically significant association: $\chi^2(7) = 5.59$, $p = .589$. The nature of the relationship is that identified ethnicity did not result in a statistically significantly higher proportion of ROM tools/management systems users versus non-users. Clearly, having 12 cells with an expected count of less than 5 violates the assumptions of the chi square test. However, it was determined that based on the number of participants who did not identify as White/Caucasian (13.61%) that "forcing" those participants would inaccurately reflect important cultural characteristics of the data set. Moreover, visual inspection suggests that it would

not have resulted in any statistical difference. Results are described in Table 7.

Table 7

Results of Chi-square Test and Ethnicity for ROM Users vs. Non-users

Reported ROM Use	Ethnicity							
	White/Caucasian	American Indian/Alaskan Native	Asian or Pacific Islander	Black or African American	Hispanic or Latino	Two or more ethnicities	Prefer not to answer	Other
No	163 (59.71%)	1 (100%)	4 (66.67%)	5 (71.43%)	5 (83.33%)	10 (52.63%)	3 (100%)	1 (100%)
Yes	110 (40.29%)	0	2 (33.33%)	2 (28.57%)	1 (16.67%)	9 (47.37%)	0	0

Note. χ^2 =5.59*, df=7, Numbers in parentheses indicated column percentages.

*p >.05

81

Primary Language. A chi square test of association was conducted to test the association between a participant's decision to utilize ROM tools/management systems and primary language. Expected cell frequencies were examined to see whether there were any expected frequencies less than 5; 2 cells (50.0%) had an expected count less than 5. The minimum expected count was 2.35. Of the 310 participants who identified English as their primary language, 122 participants reported using ROM tools/management systems, while 188 did not. Of the 6 participants who did not report English as their primary language or reported bilingual abilities, 2 reported using ROM tools/management systems while 4 did not. A phi coefficient was calculated to assess the strength of this relationship: Φ = .017; [-0.10, 0.12] This corresponds to a small effect size. This was not a statistically significant association: $\chi^2(1) = .09$, $p = .765$. This result was also not statistically significant by the Fisher's Exact Test, $p = 1.00$. The nature of the relationship is that self reported primary language did not result in a statistically significantly higher proportion of ROM tools/management systems users versus non-users. Results are described in Table 8.

Table 8

Results of Chi-square Test and Primary Language for ROM Users vs. Non-users

Reported ROM Use	Primary Language	
	English	Language Other than English/Bilingual
No	188 (60.65%)	4 (66.67%)
Yes	122 (39.35%)	2 (33.63%)

Note. χ^2 =0.09*, df=1, Numbers in parentheses indicate column percentages.
*p >.05

Theoretical Orientation. A chi square test of association was conducted to test the association between a participant's decision to utilize ROM tools/management systems and their identified theoretical orientation. Expected cell frequencies were examined to see whether there were any expected frequencies less than 5; 1 cell (8.3%) had an expected count less than 5. The minimum expected count was 4.71. Of the 120 participants who identified Integrative/Holistic/Eclectic as their theoretical orientation, 44 participants reported using ROM tools/management systems, while 76 did not. Of the 43 participants who identified Humanistic (Client centered, Gestalt, Existential), 16 participants reported using ROM tools/management systems, while 27 did not. Of the 96 participants who identified Behavioral (Cognitive-Behavioral) as their theoretical orientation, 44 participants reported using ROM tools/management systems, while 52 did not. Of the 28 participants who identified Psychoanalytic/Psychodynamic, 8 participants reported using ROM tools/management systems, while 20 did not. Of the 12 participants who identified Cognitive, 4 participants reported using ROM tools/management systems, while 8 did not. Of the 17 participants who identified "Other" as their theoretical orientation 8 participants reported using ROM tools/management systems, while 9 did not. A phi coefficient was calculated to assess the strength of this relationship: $\Phi = .114$; [-0.00, 0.22]. This corresponds to a small effect size. This was not a statistically significant association: $\chi^2(5) = 4.12$, $p = .534$. The nature of the relationship was that a participant's theoretical orientation did not result in a statistically significantly relationship between ROM tools/management systems users versus non-users. Results are described in Table 9.

Table 9

Results of Chi-square Test and Theoretical Orientation for ROM Users vs. Non-users

Reported ROM Use	Theoretical Orientation					
	Psychoanalytic/ Psychodynamic	Behavioral (Cognitive-Behavioral)	Cognitive	Humanistic (Client Centered, Gestalt, Existential)	Integrative/Holistic/ Eclectic	Other
No	20 (71.43%)	52 (54.17%)	8 (66.67%)	27 (62.79%)	76 (63.33%)	9 (52.94%)
Yes	8 (28.57%)	44 (45.83%)	4 (33.33%)	16 (37.21%)	44 (36.67%)	8 (47.06%)

Note. χ^2 =4.12*, df=5, Numbers in parentheses indicated column percentages.

* p >.05

Hypothesis 1c: *This hypothesis stated that general therapist characteristics, specifically in regards to training background, would not produce a statistically significant relationship regarding the use of routine outcome monitoring (ROM) tools/management systems*. Data analyses suggested mixed results based on the particular training background variable in question. The following are the results of the statistical analyses conducted to detect significant relationships between a participant's decision to use ROM tools/management systems and the training background variables of: 1) Type of degree participants have obtained; and 2) Whether or not they were ever required to use ROM tools/management systems as part of their clinical training.

Degree Type. A chi square test of association was conducted to test the association between a participant's decision to utilize ROM tools/management systems and the type of degree obtained by the participants in the study. Expected cell frequencies were examined to see whether there were any expected frequencies less than 5; 0 cells (0.0%) have expected count less than 5. The minimum expected count was 5.10. Of the 88 participants who earned a doctoral level degree (Ph.D., Psy.D., Ed.D, M.D./D.O.), 46 participants reported using ROM tools/management systems, while 42 did not. Of the 215 participants who earned a Master's level degree (MSW, MFT, M.A./M.S., M.Ed./Other equivalent Master's Degree)) 72 participants reported using ROM tools/management systems, while 143 did not. Of the 13 participants who earned a degree coded as "Other," (Bachelor's, Did not report, Unknown, etc.) 6 participants reported using ROM tools/management systems, while 7 did not. A phi coefficient was calculated to assess the strength of

this relationship: Φ = .174; [0.06, 0.28]. This corresponds to a small effect size. Based on the adjusted alpha level, this was a statistically non-significant association: $\chi^2(2) = 9.51$, $p = .009$. However, visual inspection of the data suggests that participants who earned a doctoral level degree (including an M.D./D.O.) are more likely to utilize ROM tools/management systems, Master's level therapists appear to be the least likely to use ROM tools/management systems, and participants who were coded as "Other" regarding degree type appear to be relatively split between ROM use and non-use. Results are described in Table 10.

Table 10

Results of Chi-square Test and Degree Type for ROM users vs. Non-users

Reported ROM Use	Degree Type		
	Doctoral Degree	Master's Degree	Other
No	42 (47.73%)	143 (66.51%)	7 (53.85%)
Yes	46 (52.27%)	72 (33.49%)	6 (46.15%)

Note. χ^2 =9.51*, df=2, Numbers in parentheses indicated column percentages.
*p =.009

ROM Requirement: A chi square test of association was conducted to test the association between a participant's current use of ROM tools/management systems and if they were ever required to utilize ROM tools/management systems during and/or after their clinical training as part of their day-to-day practice of psychotherapy. Preliminary data screening for this variable resulted in two participants being deleted from this analysis due their choice to leave this item blank on the survey. Expected cell frequencies were examined to see whether there were any expected frequencies less than 5; 2 cells (20.0%) have expected count less than 5. The minimum expected count was 0.78. Of the 123 participants who

identified as "Never" being required to utilize ROM tools/management systems, 28 participants reported current use of ROM tools/management systems, while 95 did not. Of the 82 participants who indicated that they were required to utilize ROM tools/management systems both during and after their graduate training, 47 participants reported current use of ROM tools/management systems, while 35 did not. Of the 77 participants who indicated that they were required to utilize ROM tools/management systems during their graduate training, 36 participants reported current use of ROM tools/management systems, while 41 did not. 32 participants who indicated that they were required to utilize ROM tools/management systems after their graduate training had concluded, 11 participants reported current use of ROM tools/management systems, while 21 did not. A phi coefficient was calculated to assess the strength of this relationship: $\Phi = .296$; [0.20,0.42]. This corresponds to a medium effect size. This was a statistically significant association: $\chi^2(3) = 27.46$, $p = .000$. Chi-square results show a statistically significant difference in regards to being required to use ROM tools/management systems among the participants. Visual inspection of the data suggests that participants who were never required to use ROM tools/management systems are the least likely to currently be using ROM tools/management systems. Participants who were required to use ROM tools/management systems during their graduate training or any point after their graduate training had concluded are somewhat likely to be currently utilizing ROM tools/management systems. Finally, participants who were required to use ROM tools/management systems both during and after their graduate training are the most likely to currently be using ROM tools/management systems. Results are

described in Table 11.

Table 11

Results of Chi-square Test and ROM Requirement for ROM Users vs. Non-users

Reported ROM Use	Required to use ROM			
	Never	Graduate Training	At any point after graduate training	Both
No	95 (77.24%)	41 (53.25%)	21 (65.62%)	35 (42.68%)
Yes	28 (22.76%)	36 (46.75%)	11 (34.38%)	47 (57.32%)

Note. χ^2 =27.46*, df=3, Numbers in parentheses indicated column percentages.
*p =.000

Hypothesis 1d: *This hypothesis stated that certain systemic influences would not produce statistically significant relationships regarding the use of routine outcome monitoring (ROM) tools/management systems*. Data analyses suggested mixed results based on the variable in question. The following are the results of the statistical analyses conducted to detect significant differences or relationships between a therapist's decision to use or not use ROM tools/management systems, and certain systemic influences examining their current practice setting and function. The specific systemic influences investigated in the present study included: 1) practice location; 2) type of clinical setting; 3) number of therapists (including themselves) providing services at their location; 4) approximate total case load; 5) approximate number of patients seen in a day; 6) approximate number of hours of supervision received each week; 7) approximate number of total years seeing patient; and 8) approximate amount of money, if any, participants are willing to spend on ROM tools/management systems each year.

Practice Location. A chi square test of association was conducted to test the

association between a participant's decision to use ROM tools/management systems and whether or not their practice is located in an urban or rural area. Preliminary data screening for this variable resulted in two participants being deleted from this analysis due their choice to leave this item blank on the survey. Expected cell frequencies were examined to see whether there were any expected frequencies less than 5; 0 cells (0.0%) have expected count less than 5. The minimum expected count was 28.60. Of the 241 participants who work in an urban setting, 93 participants reported using ROM tools/management systems, while 148 denied use. Of the 73 participants who work in a rural setting, 30 participants reported using ROM tools/management systems, while 43 denied use. A phi coefficient was calculated to assess the strength of this relationship: $\Phi = .022$; [-0.09,0.13]. This corresponded to an extremely small effect size. This was not a statistically significant association: $\chi^2(1) = .148$ $p = .701$. This was also not statistically significant by the Fisher's Exact Test, $p = .784$. The nature of the relationship between a participant's practice location (urban vs. rural) and decision to use or not use ROM tools/management systems was not statistically significant. Results are described in Table 12.

Table 12

Results of Chi-square Test and Location for ROM Users vs. Non-users

Reported ROM Use	Location	
	Urban	Rural
No	148 (61.41%)	43 (58.90%)
Yes	93 (38.59%)	30 (41.10%)

Note. χ^2 =.148*, df=1, Numbers in parentheses indicated column percentages.
*p =.701

Clinical Setting. A chi square test of association was conducted to test the association between a participant's decision to utilize ROM tools/management systems and the type of clinical setting where they currently practice. Preliminary data screening for this variable resulted in two participants being deleted from this analysis due their choice to leave this item blank on the survey. Expected cell frequencies were examined to see whether there were any expected frequencies less than 5; 11 cells (55.0%) have expected count less than 5. The minimum expected count was 0.79. Of the 220 participants who work in a private practice setting, 68 participants reported using ROM tools/management systems, while 152 did not. Of the 30 participants who work in a Community Mental Health Center, 11 participants reported using ROM tools/management systems, while 19 did not. Of the 16 participants who work in a University Counseling Center, 15 participants reported using ROM tools/management systems, while 1 did not. Of the 9 participants who work in a Hospital Clinic, 7 participants reported using ROM tools/management systems, while 2 did not. Of the 4 participants who work in an In-patient setting, 1 participant reported using ROM tools/management systems, while 3 did not. Of the 4 participants who work in a Substance Abuse Treatment Center, 3 participants reported using ROM tools/management systems, while 1 did not. Of the 4 participants who work for the VA/Dept. of Defense, 3 participants reported using ROM tools/management systems, while 1 did not. Of the 4 participants who work for a Government Agency, 3 participants reported using ROM tools/management systems, 1 denied using ROM tools/management systems. Of the 2 participants who indicated they work in a Correctional facility, 1 indicated the

daily use of ROM tools/management systems and 1 did not. Of the 22 participants who selected "Other" as their practice setting, 12 participants reported using ROM tools/management systems, while 10 did not. A phi coefficient was calculated to assess the strength of this relationship: $\Phi = .361$; [0.26,0.49]. This corresponds to a medium effect size. This was a statistically significant association: $\chi^2(9) = 41.02$, $p = .000$. Thus, there was a statistically significant relationship between participants' use of ROM tools/management systems and the type of clinical setting where they currently practice. Visual inspection of the data set suggests that participants who work in an institutionalized setting are more likely to utilize ROM tools/management systems than participants who reported working in a private practice setting. Results are described in Table 13.

Table 13

Results of Chi-square Test and Clinical Setting for ROM Users vs. Non-users

Reported ROM Use	Clinical Setting									
	Private Practice	Community Mental Health Center	Hospital Clinic	University	Inpatient	Correctional	Substance Abuse Treatment Center	VA/Dept. of Defense	Govt. Agency	Other
No	152 (69.09%)	19 (63.33%)	2 (22.22%)	1 (6.25%)	3 (75%)	1 (50%)	1 (25%)	1 (25%)	1 (25%)	10 (45.45%)
Yes	68 (30.91%)	11 (36.67%)	7 (77.78%)	15 (93.75%)	1 (25%)	1 (50%)	3 (75%)	3 (75%)	3 (75%)	12 (54.55%)

Note. χ^2 =41.02*, df=9, Numbers in parentheses indicated column percentages.

*p =.000

Clinical Setting Follow-Up Analysis. It was determined that three separate follow up statistical analyses would be conducted in order to further explore the data. As each of these additional tests were centered on the variable of clinical setting, it was determined that each of these analyses were conceptually related and should therefore be subjected to its own adjusted alpha level. Thus, the family wise error rate has been adjusted to $p < .017$ (.05/3) for each of the three follow up analyses that will be discussed.

Additionally, it was determined that for the follow up analyses examining clinical setting, the variable would be recoded as binary categories (Private Practice vs. Institutionalized). Therefore, the previous reported clinical settings of, In-patient, Community and Mental Health Center, Hospital Clinic, University, Correctional, Substance Abuse Treatment Center, VA/DOD, and Government agency were grouped and labeled as "Institutionalized" settings. This grouping was based on the rationale that these types of settings were likely to rely on outside funding sources and are probably subject to external policies governing day to day operations of the agency. This resulted in a total of 74 different clinical settings being combined into the "Institutionalized" category.

A follow up chi square test of association was conducted to test the association between a participant's decision to utilize ROM tools/management systems and the type of clinical setting (Private Practice vs. Institutionalized). This was an additional test based on data derived from the planned statistical tests in order to better meet the assumptions of the chi square test of association test. Expected cell frequencies were examined to see whether there were any expected frequencies less than 5; 0 cells (0.0%) have expected count less than 5. The minimum expected count was 27.90. Of the 220 participants who work in a private practice setting, 68 participants reported using ROM tools/management

systems, while 152 did not. Of the 73 participants who work in an institutionalized setting, 44 participants reported using ROM tools/management systems, while 29 did not. A phi coefficient was calculated to assess the strength of this relationship: $\Phi = .261$; [0.12, 0.38]. This corresponds to a medium effect size. This was a statistically significant association: $\chi^2(1) = 20.02$, $p = .000$. This was also statistically significant by the Fisher's Exact Test, $p = .000$. Thus, there was a statistically significant relationship between participants' use of ROM tools/management systems and whether they work in a private practice or an institutionalized setting. Visual inspection of the data set suggests that participants who work in an institutionalized setting are more likely to utilize ROM tools/management systems than participants who reported working in a private practice setting. Results are described in Table 14.

Table 14
Follow Up Analysis: Results of Chi-square Test and Clinical Setting for ROM Users vs. Non-users

Reported ROM Use	Clinical Setting	
	Private Practice	Institutionalized
No	152 (69.09%)	29 (39.37%)
Yes	68 (30.91%)	44 (60.27%)

Note. χ^2 =20.02*, df=1, Numbers in parentheses indicated column percentages.
*p =.000

Therapists at Location. An independent samples t-test was conducted to compare the number of therapists, including oneself, providing services at their location for those who indicated "No" to the use of ROM tools/management systems, $M = 7.71$, $SD = 9.05$, and for those who indicated "Yes" to the use of ROM tools/management systems, $M = 10.00$, $SD = 10.95$, 95% CI [-4.53, -0.51]. Based on the adjusted alpha level, a non-significant difference was found, $t(312) = -2.01$, $p = .045$. The difference represents a large effect size ($d = .94$) indicating that there is no significance difference between the number of

therapists practicing at the same location and a therapist's decision to use or not use ROM tools/management systems.

Caseload. An independent samples t-test was conducted to compare the approximate caseload for those who indicated "No" to the use of ROM tools/management systems, $M = 25.77$, $SD = 19.78$, and for those who indicated "Yes" to the use of ROM tools/management systems, $M = 32.20$, $SD = 53.41$, 95% CI [-15.43, 2.57]. A non-significant difference was found, $t(269) = -1.41$, $p > .05$. The difference represents a large effect size ($d = 1.12$) indicating that on average, there is no significance difference in total caseload between therapists who choose to utilize ROM tools/management systems and those who do not.

Daily Patient Contacts. An independent samples t-test was conducted to compare the approximate number of patients therapists seen in a day for those who indicated "No" to the use of ROM tools/management systems, $M = 5.72$, $SD = 3.19$, and for those who indicated "Yes" to the use of ROM tools/management systems, $M = 5.33$, $SD = 2.52$, 95% CI [-.28, 1.06]. A non-significant difference was found, $t(312) = .254$, $p > .05$. The difference represents a small effect size ($d = .23$) indicating that on average, there is no significance difference in the number of patients therapists see in a day between therapists who choose to utilize ROM tools/management systems and those who do not.

Supervision. An independent samples t-test was conducted to compare the approximate number of supervision hours therapists receive each week for those who indicated "No" to the use of ROM tools/management systems, $M = 0.63$, $SD = 0.98$, and for those who indicated "Yes" to the use of ROM tools/management systems, $M = 1.04$, $SD = 1.56$, 95% CI [-0.69, -0.12]. Based on the adjusted alpha level, a non-significant difference

was found, $t(309) = -2.82$, $p = .005$. The difference represents a medium effect size ($d = 0.42$) indicating that there is no significant differences between the amount of supervision therapists receive each week and whether or not they choose to use or not use ROM tools/management systems.

Supervision by Clinical Setting Follow Up Analysis. A follow up analysis was conducted to determine if there was a statistically significant difference between the amounts of supervision hours required at private practice versus institutionalized settings. This was a follow up analysis based on data derived from the planned statistical tests. As mentioned previously, the family wise error rate has been adjusted to $p < .017$ and is based on the binary coding of the clinical setting variable (Private Practice vs. Institutionalized).

An independent samples t-test was conducted to compare the approximate number of supervision hours therapists receive each week for those who indicated working in a Private Practice setting, $M = 0.38$, $SD = 0.62$, and for those who indicated working in an Institutionalized setting, $M = 1.74$, $SD = 1.70$, 95% CI [-1.63, -1.10]. Based on the adjusted alpha level, a significant difference was found, $t(288) = 129.26$, $p = .000$. The difference represents an extremely large effect size ($d = 1.43$) indicating that Institutionalized settings require, on average, a greater amount of supervision hours per week than Private Practice settings.

Years of Practice. An independent samples t-test was conducted to compare the approximate number of years therapists have been practicing for those who indicated "No" to the use of ROM tools/management systems, $M = 9.97$, $SD = 8.62$, and for those who indicated "Yes" to the use of ROM tools/management systems, $M = 10.87$, $SD = 10.49$, 95% CI [-3.05, 1.24]. A non-significant difference was found, $t(310) = -0.827$, $p > .05$. The

difference represents a medium effect size (d = 0.30) indicating that on average, there is no significance difference in the approximate number of years in practice between therapists who choose to utilize ROM tools/management systems and those who do not.

ROM Use vs. Non-use and Clinical Setting by Years of Practice. A follow up analysis was conducted to determine if there was a statistically significant difference between the overall amounts of years in practice and whether or not a participant chooses to use/not use ROM and the type of clinical setting where they work. This was an additional test based on data derived from the planned statistical tests. Similar to the previous follow up test, it was determined that the clinical setting variable would be based on the binary categories of Private Practice vs. Institutionalized and would be subject to the adjusted alpha level of $p < .017$.

A one-way ANOVA was conducted to compare the means of approximate total years in practice for participants grouped by ROM non-use versus ROM use and Clinical Setting: Group 1 = ROM non-use in Private Practice Setting (n = 152, M = 10.74, SD = 9.02); 95% CI = [9.30, 12.19]. Group 2 = ROM use in Private Practice Setting (n = 67, M = 12.52, SD = 11.53); 95% CI = [9.70, 15.33]. Group 3 = ROM non-use in Institutionalized Setting (n = 28, M = 5.77, SD = 4.36); 95% CI = [4.08, 7.46]. Group = ROM use in Institutionalized Setting (n = 43, M = 8.63, SD = 8.20); 95% CI = [6.10, 11.15]. The overall F examining clinician ratings for the one-way ANOVA was statistically significant, $F(3,286) = 4.11$, $p = 0.007$. This corresponded to an eta squared effect size = 0.04; that is, about .04% of the variance in years of practice was predictable from ROM use/ROM non-use and clinical setting. This is an extremely small effect. Post hoc comparisons using the Tukey HSD test revealed that the average length of time practicing (M=12.52, SD=11.53) for ROM users in private practice

settings was significantly different than the average length of time practicing for ROM non-users (M=5.77, SD=4.36) in institutionalized settings ($p < .017$). There were no other statistically significant differences in average length of practices between the ROM users and ROM non-users in private practice settings and ROM users versus ROM non-users in institutionalized settings. Taken together, these results suggest that years practicing can effect ROM use in certain settings.

Money. A chi square test of association was conducted to test the association between a participant's decision to utilize ROM tools/management systems and the amount of money they would be willing to spend on ROM tools/management systems per year. Preliminary data screening for this variable resulted in two participants being deleted from this analysis due their choice to leave this item blank on the survey. In an effort to satisfy the assumptions of the chi square analysis, participants who reported a willingness to spend $500 or more were combined into a single category. Expected cell frequencies were examined to see whether there were any expected frequencies less than 5; 0 cells have expected count less than 5. The minimum expected count was 5.53. Of the 259 participants who stated they would be willing to spend $0-$249 per year, 95 participants reported using ROM tools/management systems, while 164 did not. Of the 41 participants who stated they would be willing to spend $250-$499 per year, 19 participants reported using ROM tools/management systems, while 22 did not. Of the 14 participants who stated they would be willing to spend $500 or more per year, 10 participants reported using ROM tools/management systems, while 4 did not. A phi coefficient was calculated to assess the strength of this relationship: $\Phi = .156$; [0.05,0.27]. This corresponds to a small effect size. Based on the adjusted alpha level, this was not a statistically significant

association: $\chi^2(2) = 7.64$, $p = .022$. Thus, there is no statistically significant relationship between participants' use of ROM tools/management systems and the amount of money one would be willing to spend on ROM tools/management systems each year. However, visual inspection of the data set would suggest that participants who spend more money are more likely to utilize ROM tools/management systems than participants who reported working in a private practice setting. Results are described in Table 15.

Table 15

Results of Chi-square Test and Money Per Year for ROM Users vs. Non-users

Reported ROM Use	Money Per Year		
	$0-$249	$250-$499	$500 or more
No	164 (63.32%)	22 (53.66%)	4 (28.57%)
Yes	95 (36.68%)	19 (46.34%)	10 (71.43%)

Note. χ^2 =7.64*, df=2, Numbers in parentheses indicated column percentages.
*p =.022

Hypothesis 2a: *This hypothesis stated that on average, within the group of therapists who endorsed the use of routine outcome monitoring (ROM) tools/management systems, most would choose not to incorporate ROM feedback results into the clinical supervision process.* Descriptive analyses suggested an inability to reject the null hypothesis. Of the total sample who answered this particular item that read, "If you do engage in routine outcome monitoring, do you discuss outcome results during supervision with your supervisor?" 124 participants (34.3%) indicated that they do not incorporate ROM feedback results into their clinical supervision process, 70 participants (19.3%) indicated that they do incorporate ROM feedback results into their clinical supervision process, and 124 participants (34.3%) chose not to answer this particular question when completing the survey. It should be noted, that it is possible participants answered "No" to discussing ROM

results during supervision if they: a) do not utilize ROM tools/management systems as part of their day-to-day practice of psychotherapy; and/or b) are not currently engage in clinical supervision. In other words, the number of "No" responses could be inflated. Additionally, if "Blank" responses can be interpreted as participants not utilizing ROM tools/management systems and/or not currently engaged in clinical supervision, then the number of "No" responses might be under-reported. The lack of precision regarding the structure of this item makes it difficult to determine possible levels of over/under reporting. Even with this limitation in mind, however, it appears within the group of therapists who do chose to utilize ROM tools/management systems, most do not discuss the feedback results with their supervisor.

Hypothesis 2b: *This hypothesis stated that within the group of therapists who endorsed the use of routine outcome monitoring (ROM) tools/management systems, none of the reported demographic variables would produce a statistically significant difference or relationship in regards to the incorporation of ROM feedback results into the clinical supervision process.* Hypothesis 2b-2d consisted of 15 different statistical tests. Thus, the alpha rate has been adjusted to $p < 0.003$ (0.05/15). Data analyses resulted in an inability to reject the null hypothesis. The following are the results of the statistical analyses conducted to detect significant differences or relationships between a therapist's decision to discuss ROM feedback with their supervisor and the demographic variables of age, gender, ethnicity, primary language, and theoretical orientation.

Age. An independent samples t-test was conducted to compare participant age for those who answered "No" to the incorporation of ROM feedback during the clinical supervision process, $M = 41.24$, $SD = 11.57$, and participant age for those who answered

"Yes" to the incorporation of ROM feedback during the clinical supervision process, M = 38.51, SD = 11.88, 95% CI [-0.72, 6.17]. A non-significant difference was found, $t(192)$= 1.562, $p > .05$. The difference represents a large effect size ($d = 0.59$) indicating that on average, there is no statistical difference in age between participants who choose to incorporate ROM feedback into their clinical supervision process and those who do not.

Gender. A chi square test of association was conducted to test the association between a participant's decision to incorporate ROM feedback into the clinical supervision process and their gender identity. Expected cell frequencies were examined to see whether there were any expected frequencies less than 5; 2 cells (33.3%) have expected count less than 5. The minimum expected count was 1.44. Of the 151 participants who gendered-identified as female, 56 reported discussing ROM feedback, while 95 did not. Of the 39 participants who gendered-identified as male, 13 reported discussing ROM feedback, while 26 did not. Of the 4 participants who gender-identified as "Other" or chose "Prefer Not to Answer," 1 reported discussing ROM feedback, while 3 did not. A phi coefficient was calculated to assess the strength of this relationship: $\Phi = .046$; [-0.09, 0.19]. This corresponds to an extremely small effect size. This was not a statistically significant association: $\chi^2(2) = .407$, $p = .816$. Thus, there was not a statistically significant relationship between gender identity and whether or not a therapist chooses to incorporate ROM feedback into their clinical supervision process. Results are described in Table 16.

Table 16

Results of Chi-square Test and Gender for ROM Feedback with Supervisor

Reported ROM Use	Gender	
	Male	Female
No	26 (66.67%)	95 (62.91%)
Yes	13 (33.33%)	56 (37.09)

Note. χ^2 =.407*, df=2, Numbers in parentheses indicated column percentages.
*p =.816

Ethnicity. A chi square test of association was conducted to test the association between a participant's decision to incorporate ROM feedback into their clinical supervision process and ethnicity. Expected cell frequencies were examined to see whether there were any expected frequencies less than 5; 12 cells (75.0%) had an expected count less than 5. The minimum expected count was 0.36. Of the 162 participants who identified as White/Caucasian, 54 reported discussing ROM feedback, while 108 did not. Of the 15 participants who identified as "Two or More Ethnicities," 9 participants reported discussing ROM feedback, while 6 did not. Of the 5 participants who identified as Black/African American, 2 participants reported discussing ROM feedback, while 3 did not. Of the 5 participants who identified as Asian/Pacific Islander, 3 participants reported discussing ROM feedback, while 2 did not. Of the 3 participants who identified as Hispanic/Latino, 1 participant reported discussing ROM feedback, while 2 did not. Of the 2 participants who selected "Prefer Not to Answer," both reported that they do not discuss ROM feedback during clinical supervision. Likewise, the participant who identified as American Indian/Alaskan Native denied discussing ROM feedback. Finally, the participant who selected "Other" in regards to ethnicity confirmed the discussion ROM feedback within the process of clinical supervision. A phi coefficient was calculated to assess the strength of

this relationship: $\Phi = .215$; [0.08, 0.39]. This corresponded to a small effect size. This was not a statistically significant association: $\chi^2(7) = 9.00$, $p = .253$. Thus, there was not a statistically significant relationship between ethnicity and whether or not a therapist chooses to incorporate ROM feedback into their clinical supervision process. The nature of the relationship is that ethnicity did not result in a statistically significantly higher proportion of those who discuss ROM feedback versus those who do not. Clearly, having 12 cells with an expected count of less than 5 violates the assumptions of the chi square test. However, it was determined that based on the number of participants who did not identify as White/Caucasian (16.5%%) that "forcing" those participants would inaccurately reflect important cultural characteristics of the data set. Moreover, visual inspection suggested that it would not have resulted in any statistical difference. Results are described in Table 17.

Table 17

Results of Chi-square Test and Ethnicity for ROM Feedback with Supervisor

Reported ROM Use	Ethnicity							
	White/Caucasian	American Indian/Alaskan Native	Asian or Pacific Islander	Black or African American	Hispanic or Latino	Two or more ethnicities	Prefer not to answer	Other
No	108 (66.67%)	1 (100%)	2 (40%)	3 (60%)	2 (66.67%)	6 (40%)	2 (100%)	0
Yes	54 (33.33%)	0	3 (60%)	2 (40%)	1 (33.33%)	9 (60%)	0	1 (100%)

Note. χ^2 =9.00*, df=7, Numbers in parentheses indicated column percentage.

*p =.253

Primary Language. A chi square test of association was conducted to test the association between a participant's decision to incorporate ROM feedback into their clinical supervision process and primary language. Expected cell frequencies were examined to see whether there were any expected frequencies less than 5; 2 cells (50.0%) had an expected count less than 5. The minimum expected count was 1.44. Of the 190 participants who identified English as their primary language, 68 participants reported discussing ROM feedback, while 122 did not. Of the 4 participants who identified their primary language as other than English or bilingual, 2 reported discussing ROM feedback while 2 did not. A phi coefficient was calculated to assess the strength of this relationship: $\Phi = .042$; [-0.10, 0.18]. This corresponds to a small effect size. This was not a statistically significant association: $\chi^2(1) = .343$, $p = .558$. This was also not significant by the Fisher's Exact Test, $p = .621$. Thus, there was not a statistically significant relationship between primary language and whether or not a therapist chooses to incorporate ROM feedback into their clinical supervision process. Results are described in Table 18.

Table 18

Results of Chi-square Test and Language for ROM Feedback with Supervisor

Reported ROM Use	Language	
	English	Other than English/Bilingual
No	122 (64.21%)	2 (50%)
Yes	68 (35.79%)	2 (50%)

Note. χ^2 =.343*, df=1, Numbers in parentheses indicated column percentages.
*p =.558

Theoretical Orientation. A chi square test of association was conducted to test the association between a participant's decision to incorporate ROM feedback into their clinical supervision process and theoretical orientation. Expected cell frequencies were examined to see whether there were any expected frequencies less than 5; 3 cells had expected count less than 5. The minimum expected count was 2.89. Of the 72 participants who identified Integrative/Holistic/Eclectic as their theoretical orientation, 27 participants reported discussing ROM feedback, while 45 did not. Of the 63 participants who identified Behavioral (Cognitive-Behavioral) as their theoretical orientation, 25 participants reported discussing ROM feedback, while 38 did not. Of the 29 participants who selected Humanistic (Client centered, Gestalt, Existential), 10 participants reported discussing ROM feedback, while 19 did not. Of the 13 participants who selected Psychoanalytic/Psychodynamic, 5 participants reported discussing ROM feedback, while 8 did not. Of the 8 participants who selected Cognitive, 1 participant reported discussing ROM feedback, while 7 did not. Of the 9 participants who identified "Other" as their theoretical orientation 2 participants reported discussing ROM feedback, while 7 did not. A phi coefficient was calculated to assess the strength of this relationship: $\Phi = .128$; [-0.01, 0.28]. This corresponds to a small effect size. This was not a statistically significant association: $\chi^2(5) = 3.16$, $p = .675$. Thus, there was not a statistically significant relationship between theoretical orientation and whether or not a therapist chooses to incorporate ROM feedback into their clinical supervision process. Results are described in Table 19.

Table 19

Results of Chi-square Test and Theoretical Orientation for ROM Feedback with Supervisor

Reported ROM Use	Theoretical Orientation					
	Psychoanalytic/ Psychodynamic	Behavioral (Cognitive-Behavioral)	Cognitive	Humanistic (Client Centered, Gestalt, Existential)	Integrative/Holistic/ Eclectic	Other
No	8 (61.54%)	38 (60.32%)	7 (87.5%)	19 (65.52%)	45 (62.5%)	7 (77.78%)
Yes	5 (38.46%)	25 (39.68%)	1 (12.5%)	10 (34.48%)	27 (37.5%)	2 (22.22%)

Note. χ^2 =3.16*, df=5, Numbers in parentheses indicated column percentages.

*p =.675

Hypothesis 2c: *This hypothesis stated that general therapist characteristics, specifically in regards to training background, would not produce a statistically significant relationship in regards to the incorporation of routine outcome monitoring (ROM) feedback results into the clinical supervision process.* Again, data analyses resulted in an inability to reject the null hypothesis. The following are the results of the statistical analyses conducted to detect significant relationships between a therapist's decision to discuss ROM feedback and the training background variables of: 1) type of degree participants have obtained; and 2) whether or not they were ever required to use ROM tools/management systems as part of their clinical training.

Degree Type. A chi square test of association was conducted to test the association between a participant's decision to utilize ROM tools/management systems and type of degree obtained by the participants in the study. Expected cell frequencies were examined to see whether there were any expected frequencies less than 5; 1 cell (16.7%) had an expected count less than 5. The minimum expected count is 3.25. Of the 50 participants who earned a doctoral level degree (Ph.D., Psy.D., Ed.D, M.D./D.O.), 15 participants reported using ROM tools/management systems, while 35 did not. Of the 135 participants who earned a Master's level degree (MSW, MFT, M.A./M.S., M.Ed./Other equivalent Master's Degree) 50 participants reported using ROM tools/management systems, while 85 did not. Of the 9 participants who earned a degree coded as "Other," (Bachelor's, Did not report, Unknown, etc.) 5 participants reported using ROM tools/management systems, while 4 did not. A phi coefficient was calculated to

assess the strength of this relationship: Φ = .110; [-0.03, 0.25]. This corresponds to a small effect size. This was a statistically significant association: $\chi^2(2) = 2.34$, p = .311. Thus, there was not a statistically significant relationship between degree type and whether or not a therapist chooses to incorporate ROM feedback into their clinical supervision process. Results are described in Table 20.

Table 20

Results of Chi-square Test and Degree Type for ROM Feedback with Supervisor

Reported ROM Use	Degree Type		
	Doctoral Degree	Master's Degree	Other
No	35 (70%)	85 (62.96%)	4 (44.44%)
Yes	15 (30%)	50 (37.04%)	5 (55.56%)

Note. χ^2 =2.34*, df=2, Numbers in parentheses indicated column percentages.
*p =.311

ROM Requirement: A chi square test of association was conducted to test the association between discussing ROM feedback during clinical supervision and occurrences of participants being required to utilize ROM tools/management systems during and/or after their clinical training as part of their day-to-day practice of psychotherapy. Expected cell frequencies were examined to see whether there were any expected frequencies less than 5; 0 cells had an expected count less than 5. The minimum expected count was 6.79. Of the 62 participants who identified as "Never" being required to utilize ROM tools/management systems, 18 participants reported discussing ROM feedback, while 44 did not. Of the 62 participants who indicated that they were required to utilize ROM tools/management systems both during and after their graduate training, 22 participants reported discussing ROM feedback, while 40 did not. Of the 50

participants who indicated that they were required to utilize ROM tools/management systems during their graduate training, 24 participants reported discussing ROM feedback, while 26 did not. Of the 19 participants who indicated that they were required to utilize ROM tools/management systems after their graduate training had concluded, 5 participants reported discussing ROM feedback, while 14 did not. A phi coefficient was calculated to assess the strength of this relationship: $\Phi = .165$; [0.02, 0.31]. This corresponds to a small effect size. This was not a statistically significant association: $\chi^2(3) = 5.22$, $p = .156$. Thus, there was not a statistically significant relationship between discussing ROM feedback and whether or not they were required to use ROM tools/management systems during and/or after their graduate training. Results are described in Table 21.

Table 21

Results of Chi-square Test and ROM Requirement for ROM Feedback with Supervisor

Reported ROM Use	Required to use ROM			
	Never	Graduate Training	At any point after graduate training	Both
No	44 (70.97%)	26 (52%)	14 (73.68%)	40 (64.52%)
Yes	18 (29.03%)	24 (48)	5 (26.32%)	22 (35.48%)

Note. χ^2 =5.22*, df=3, Numbers in parentheses indicated column percentages.
*p =.156

Hypothesis 2d: *This hypothesis stated that systemic influences would not produce statistically significant relationships regarding the discussion of routine outcome monitoring (ROM) feedback during the process of clinical supervision*. Again, data analyses suggested mixed results based on the particular systemic variable in question. The following are the results of the statistical analyses conducted to

detect significant differences or relationships between a therapist's decision to discuss ROM feedback during the process of clinical supervision and certain systemic influences, which specifically examine the participant's current practice setting and function. The specific systemic influences investigated in the present study included: 1) practice location; 2) type of clinical setting; 3) number of therapists (including themselves) providing services at their location; 4) approximate total case load; 5) approximate number of patients seen in a day; 6) approximate number of hours of supervision received each week; 7) approximate number of total years seeing patients; and 8) approximate amount of money, if any, participants are willing to spend on ROM tools/management systems each year.

Practice Location. A chi square test of association was conducted to test the association between a participant's decision to discuss ROM feedback during the process of clinical supervision and whether or not their practice is located in an urban or rural area. Expected cell frequencies were examined to see whether there were any expected frequencies less than 5; 0 cells had an expected count less than 5. The minimum expected count was 17.52. Of the 144 participants who work in an urban setting, 48 participants reported discussing ROM feedback, while 96 did not. Of the 49 participants who work in a rural setting, 21 participants reported discussing ROM feedback, while 28 did not. A phi coefficient was calculated to assess the strength of this relationship: $\Phi = .086$; [-0.05, 0.23]. This corresponded to a small effect size. This was not a statistically significant association: $\chi^2(1) = 1.44$, $p = .230$. Thus, there was not a statistically significant relationship between a therapist's decision to discuss ROM feedback during the process of clinical

supervision and practice location (urban vs. rural). Results are described in Table 22.

Table 22

Results of Chi-square Test and Location for ROM Feedback with Supervisor

Reported ROM Use	Location	
	Urban	Rural
No	96 (66.67%)	28 (57.14%)
Yes	48 (33.33%)	21 (42.86%)

Note. χ^2 =1.44*, df=1, Numbers in parentheses indicated column percentages.
*p =.230

Clinical Setting. A chi square test of association was conducted to test the association between a participant's decision to discuss ROM feedback during the process of clinical supervision and their type of clinical setting. Expected cell frequencies were examined to see whether there were any expected frequencies less than 5; 13 cells (65%) had an expected count less than 5. The minimum expected count was 0.72. Of the 122 participants who work in a private practice setting, 32 participants reported discussing ROM feedback, while 90 did not. Of the 20 participants who work in a Community Mental Health Center, 8 participants reported discussing ROM feedback, while 12 did not. Of the 12 participants who work in a University Counseling Center, 9 participants reported discussing ROM feedback while 3 did not. Of the 7 participants who work in a Hospital Clinic, 4 participants reported discussing ROM feedback, while 3 did not. Of the 4 participants who work a Government Agency, 2 participants reported discussing ROM feedback while 2 did not. Of the 3 participants who work in a Substance Abuse Treatment Center, 2 participants reported discussing ROM feedback, while 1 did

not. Of the 3 participants who work for the VA/Dept. of Defense, 2 participants reported discussing ROM feedback, while 1 did not. Of the 2 participants who work in an In-Patient setting, 1 participant reported discussing ROM feedback and 1 did not. Of the 2 participants who work in Correctional setting, 1 participant reported discussing ROM feedback and 1 did not. Of the 19 participants who selected "Other" as their practice setting, 9 participants reported discussing ROM feedback, while 10 did not. A phi coefficient was calculated to assess the strength of this relationship: $\Phi = .310$; [0.18, 0.49]. This corresponds to a medium effect size. Based on the adjusted alpha level, this was not a statistically significant association: $\chi^2(9) = 18.65$, $p = .028$. Thus, there was no statistically significant relationship between participants' decision to incorporate ROM feedback into the supervision process and the type of clinical setting where they are employed. However, visual inspection of the data set would suggest that participants who work in institutionalized settings are more likely to discuss ROM feedback during supervision than participants who reported working in a private practice setting. Results are described in Table 23.

Table 23

Results of Chi-square Test and Clinical Setting for ROM Feedback with Supervisor

Reported ROM Use	Clinical Setting									
	Private Practice	Community Mental Health Center	Hospital Clinic	University	Inpatient	Correctional	Substance Abuse Treatment Center	VA/Dept. of Defense	Govt. Agency	Other
No	90 (73.77%)	12 (60%)	3 (42.86%)	3 (25%)	1 (50%)	1 (50%)	1 (33.33%)	1 (33.33%)	2 (50%)	10 (52.63%)
Yes	32 (26.23%)	8 (40%)	4 (57.14%)	9 (75%)	1 (50%)	1 (50%)	2 (66.64%)	2 (66.64%)	2 (50%)	9 (47.37%)

Note. χ^2 =18.65*, df=9, Numbers in parentheses indicated column percentages.

*p =.028

Therapists at Location. An independent samples t-test was conducted to compare the number of therapists, including oneself, providing services at their location for those who indicated "No" to incorporating ROM feedback during the process of clinical supervision, $M = 7.45$, $SD = 9.05$, and for those who indicated "Yes" to incorporating ROM feedback, $M = 10.00$, $SD = 9.15$, 95% CI [-5.44, .312]. A non-significant difference was found, $t(190) = -1.76$, $p > .05$. The difference represents a large effect size ($d = 0.82$) indicating that on average, there is no statistical difference in the total amount of therapists providing services at a location between those who choose to discuss ROM feedback during the process of clinical supervision and those who do not.

Caseload. An independent samples t-test was conducted to compare the approximate case load for those who answered "No" to incorporating ROM feedback into their clinical supervision process, $M = 31.12$, $SD = 49.11$, and for those who answered "Yes" to incorporating ROM feedback, $M = 25.24$, $SD = 29.98$, 95% CI [-7.97, 19.73]. A non-significant difference was found, $t(166) = .839$, $p > .05$. The difference represents a large effect size ($d = 0.90$) indicating that on average, there is no significance difference in total caseload between therapists who choose to discuss ROM feedback and those who do not. Again, when preparing this variable for analysis, it was observed that participants responded to this item by providing the approximate number of patients seen in a week/month versus an overall total caseload. This resulted in approximately 20 participants choosing to leave this item blank. This suggests that this particular item lacked clarity and did not align with

how the participants typically interpret their caseloads/quantity of work (see hypothesis 1d).

Daily Patient Contacts. An independent samples t-test was conducted to compare the approximate number of patients therapists see in a day for those who indicated "No" to incorporating ROM feedback into their clinical supervision process, $M = 5.52$, $SD = 2.53$, and for those who indicated "Yes" to incorporating ROM feedback, $M = 5.24$, $SD = 2.49$, 95% CI [-.47, 1.02]. A non-significant difference was found, $t(191) = .726$, $p > .05$. The difference represents a small effect size ($d = .13$) indicating that on average, there is no significant difference in the number of patients therapists see in a day between therapists who choose to discuss ROM feedback during the process of clinical supervision and those who do not.

Supervision. An independent samples t-test was conducted to compare the approximate number of supervision hours therapists receive each week for those who indicated "No" to incorporating ROM feedback into their clinical supervision process, $M = 0.41$, $SD = 0.74$, and for those who indicated "Yes" to incorporating ROM feedback $M = 1.85$, $SD = 1.75$, 95% CI [-1.80, -1.09]. A significant difference was found, $t(190) = -8.00$, $p = .000$. The difference represented an extremely large effect size ($d = 1.38$) indicating that the therapists who report incorporating ROM feedback into their clinical supervision process on average receive more supervision each week than the therapists who do not incorporate ROM feedback into their clinical supervision process and are also receiving weekly supervision.

Years of Practice. An independent samples t-test was conducted to compare the approximate number of years therapists have been practicing for those who

indicated "No" to incorporating ROM feedback into their clinical supervision process, M = 10.48, SD = 8.18, and for those who indicated "Yes" to incorporating ROM feedback, M = 7.29, SD = 7.83, 95% CI [0.80, 5.57]. Based on the adjusted alpha level, a non-significant difference was found, $t(189)$= 2.63, p = .009. The difference represented an extremely large effect size (d = 1.12) indicating that there is no significant difference between a therapist's average length of practicing for those who choose to use or not use ROM tools/management systems.

Money. A chi square test of association was conducted to test the association between a participant's decision to discuss ROM feedback during the process of clinical supervision and the amount of money they would be willing to spend on ROM tools/management systems per year. Preliminary data screening for this variable resulted in 1 participant being deleted from this analysis due their choice to leave this item blank on the survey. In an effort to satisfy the assumptions of the chi square analysis, participants who reported a willingness to spend $500 or more were combined into a single category. Expected cell frequencies were examined to see whether there were any expected frequencies less than 5; 1 cell (16.7%) had an expected count less than 5. The minimum expected count was 3.26. Of the 163 participants who stated they would be willing to spend $0-$249 per year, 51 participants reported using ROM tools/management systems, while 112 did not. Of the 21 participants who stated they would be willing to spend $250-$499 per year, 12 participants reported using ROM tools/management systems, while 9 did not. Of the 9 participants who stated they would be willing to spend $500 or more per year, 7 participants reported using ROM tools/management systems, while 2 did not. A

phi coefficient was calculated to assess the strength of this relationship: $\Phi = .254$; [0.11, 0.40]. This corresponds to a small-medium effect size. This was a statistically significant association: $\chi^2(2) = 12.42$, $p = .002$. Thus, there was a statistically significant relationship between participants' decision to incorporate ROM feedback into the supervision process and the overall amount of money they would be willing to spend on ROM tools/management systems. Visual inspection of the data set would suggest that participants who are willing to spend larger quantities of money on ROM tools/management systems are more likely to discuss ROM feedback during supervision than participants who are unwilling to invest in ROM tools/management systems. Results are described in Table 24.

Table 24

Results of Chi-square Test and Money Per Year for ROM Feedback with Supervisor

Reported ROM Use	Money Per Year		
	$0-$249	$250-$499	$500 or more
No	112 (68.71%)	9 (42.86%)	2 (22.22%)
Yes	51 (31.29%)	12 (57.14%)	7 (77.78%)

Note. χ^2 =12.42*, df=2, Numbers in parentheses indicated column percentages.
*p =.002

Hypothesis 3: *Participants who chose to utilize routine outcome monitoring (ROM) tools/management systems will display higher levels of self-reflection and insight as measured by the SRIS.* Hypothesis 3 consisted of three different statistical tests. Thus, the alpha rate has been adjusted to $p < 0.017$ (0.05/3).

Engagement in Self-Reflection Sub-scale. An independent samples t-test was conducted to compare engagement in self-reflection scores for those who indicated "No" to the use of ROM tools/management systems in their day to day practice of

psychotherapy, M = 30.57, SD = 4.35, and for those who indicated "yes" to utilizing ROM tools/management systems on a daily basis, M = 31.31, SD = 3.50, 95% CI [-1.65, 0.177]. A non-significant difference was found, $t(314) = -1.59$, $p > .05$. The difference represented medium effect size (d = 0.37) indicating that on average, there is not a significance difference in the level of engagement in self-reflection between therapists who utilize ROM tools/management systems and those who do not.

Need for Self-Reflection Sub-scale. An independent samples t-test was conducted to compare need for self-reflection scores for those who indicated "No" to the use of ROM tools/management systems in their day-to-day practice of psychotherapy, M = 29.95, SD = 4.44, and for those who indicated "Yes" to utilizing ROM tools/management systems on a daily basis, M = 31.16, SD = 3.68, 95% CI [-2.15, -0.265]. Based on the adjusted alpha level, a significant difference was found, $t(314) = -2.52$, $p = .012$. The difference represented a large effect size (d = 0.59) indicating that the therapists who report utilizing ROM tools/management systems on a daily basis, on average, display a higher need for self-reflection than the therapists who do not utilize ROM tools/management systems.

Insight Sub-scale. An independent samples t-test was conducted to compare insight scores for those who indicated "No" to the use of ROM tools/management systems in their day to day practice of psychotherapy, M = 40.12, SD = 4.27, and for those who indicated "Yes" to utilizing ROM tools/management systems on a daily basis, M = 40.06, SD = 4.49, 95% CI [-0.925, 1.05]. A non-significant difference was found, $t(314) = .126$, $p > .05$. The difference represented an extremely small effect

size (d = 0.03) indicating that on average, there is not a significance difference in the level of insight between therapists who utilize ROM tools/management systems and those who do not. Results are described in Table 25.

Table 25
ROM Use versus Non-use: Self-reflection and Insight

Reported ROM Use	Mean Scores		
	Need for Self-reflection	Engagement in Self-reflection	Level of Insight
Yes	31.16	31.31	40.06
No	29.95	30.57	40.12
Domain Maximum Value	36.00	36.00	42.00

Hypothesis 4: *The participants who discuss routine outcome monitoring (ROM) feedback within the process of clinical supervision will display higher levels of self-reflection and insight (as measured by the SRIS).* Hypothesis 4 consisted of three different statistical tests. Thus, the alpha rate has been adjusted to $p < 0.017$ (0.05/3).

Engagement in Self-Reflection Sub-scale. An independent samples t-test was conducted to compare engagement in self-reflection scores for those who indicated "No" to discussing ROM feedback during the process of clinical supervision, M = 30.65, SD = 4.20, and for those who indicated "Yes" to discussing ROM feedback within supervision, M = 31.41, SD = 3.32, 95% CI [-1.91, 0.392]. A non-significant difference was found, $t(192)$= -1.30, $p > .05$. The difference represented a medium effect size (d = 0.39) indicating that on average, there is not a significance difference

in the level of engagement in self-reflection between therapists who discuss ROM feedback and those who do not.

Need for Self-Reflection Sub-scale. An independent samples t-test was conducted to compare need for self-reflection scores for those who indicated "No" to discussing ROM feedback during the process of clinical supervision, $M = 30.25$, $SD = 4.22$, and for those who indicated "Yes" to discussing ROM feedback within supervision, $M = 31.40$, $SD = 3.43$, 95% CI [-2.32, 0.02]. A non-significant difference was found, $t(192) = -1.95$, $p = .053$. The difference represents a large effect size ($d = 0.58$) indicating that on average, there is not a significance difference in the need for self-reflection between therapists who discuss ROM feedback and those who do not.

Insight Sub-scale. An independent samples t-test was conducted to compare insight scores for those who indicated "No" to discussing ROM feedback during the process of clinical supervision, $M = 40.59$, $SD = 4.65$, and for those who indicated "Yes" to discussing ROM feedback within supervision, $M = 39.19$, $SD = 4.55$, 95% CI [0.042, 2.764]. Based on the adjusted alpha level, a non-significant difference was found, $t(192) = 2.03$, $p = .043$. The difference represents a large effect size ($d = 0.65$) indicating that the therapists who report discussing ROM feedback during the process of clinical supervision do not, on average, display higher levels of insight than the therapists who do not utilize ROM tools/management systems and are also receiving weekly supervision. Results are described in Table 26.

Table 26
ROM Use vs. Non Use with Clinical Supervision: Self-reflection and Insight

Reported ROM Use	Mean Scores		
	Need for Self-reflection	Engagement in Self-reflection	Level of Insight
Yes	31.40	31.41	39.19
No	30.25	30.65	40.59
Domain Maximum Value	36.00	36.00	42.00

Hypothesis 5a: *Participants will rate themselves as "above average clinicians" when compared to their counterparts, i.e., they will demonstrate a higher level of self-assessment bias.* Hypothesis 5 consisted of four different statistical tests. Thus, the alpha rate has been adjusted to $p < 0.0125$ (0.05/4).

Descriptive statistics revealed that participants rated their skills to fall between average and above average when compared to other mental health professionals within their field who possess similar credentials. On average, participants reported their skills to be in the 68th percentile ($M = 68.48$, $SD = 13.04$). The data set mode was at the 75th percentile. 4 participants (1%) rated themselves below the 50th percentile, 147 participants (46%) rated themselves between the 50th and 75th percentiles, and 166 participants (52%) rated themselves at the 75th percentile or above.

A one-way ANOVA was conducted to compare the mean of self-assessed ratings for participants grouped by credential: Group 1 = Doctoral Level ($n = 88$, $M = 68.38$, $SD = 13.15$); 95% CI = [65.60, 71.16]. Group 2 = Master's Level ($n = 214$, $M = 68.79$, $SD = 12.88$); 95% CI = [67.05, 70.52]. Group 3 = Other (n = 13, M = 66.92, SD =

14.80); 95% CI = [57.98, 75.86]. The overall *F* examining clinician ratings for the one-way ANOVA was statistically non-significant, $F(2,312) = 0.143$, $p = 0.867$. This corresponded to an eta squared effect size = .0009; that is, about .09% of the variance in self-assessed rating scores was predictable from the level of credential. This is an extremely small effect. In other words, while levels of credential produced different self-assessed ratings, no significant differences were found.

Hypothesis 5b: *Participants will, on average, overestimate the percentage of their patients that improve as a result of being engaged in treatment (i.e., they will demonstrate a higher level of positive self-assessment bias regarding patient improvement).*

Descriptive statistics revealed that participants believed that the majority of their patients improved as a result of being in psychotherapy. On average, participants reported that 67.63% (*SD* = 17.02) of their patients improved due to being engaged in psychotherapy. The data set mode was at the 60th percentile. Twenty-nine participants (9%) indicated that less than 50% of their patients improve while in psychotherapy with them, with a range from 2.5% - 45%. 147 participants (47%) indicated that 50% - 70% of their patients improve while in psychotherapy with them. Finally, 136 participants (44%) indicated that 75% or more of their patients improve while in psychotherapy with them, with a range from 75% - 100%. 36 participants (12%) reported that 90% or more of their patients improved while in psychotherapy, with one participant indicating that 100% of their patients improve.

A one-way ANOVA was conducted to compare the mean of self-assessed patient improvement percentages for participants grouped by level of credential: Group 1 = Doctoral Level (n = 86, M = 65.17, SD = 17.28); 95% CI = [61.47, 68.88]. Group 2 = Master's Level (n = 211, M = 68.85, SD = 16.90); 95% CI = [66.55, 71.14]. The overall F examining clinician ratings for the one-way ANOVA was statistically non-significant, $F(2,307) = 1.446$, $p = 0.237$ This corresponded to an eta squared effect size = .0009; that is, about 0.09% of the variance in self-assessed patient improvement percentage was predictable from the level of credential. This is an extremely small effect. In other words, while levels of credential produced different self-assessed ratings of patient improvement, no significant differences were found.

Hypothesis 5c: *Participants will, on average, underestimate the percentage of their patients that remain the same as a result of being engaged in treatment.*

Descriptive statistics revealed that study participants believed that the minority of their patients remained the same as a result of being engaged in a course of psychotherapy. On average, participants reported that 24.95% (SD = 13.95) of their patients remained the same due to being engaged in psychotherapy. The data set mode was 20%. 278 participants (91%) indicated that less than 50% of their patients show no response to treatment, with a range from 0% - 45%. 27 participants (9%) indicated that 50% - 65% of their patients remained the same while in psychotherapy with them. Finally, 2 participants (0.01%) indicated that 75% or more of their patients remained the same while in psychotherapy with them, with a range from 80% and 95% non-response rates respectively. 55

participants (18%) reported 10% or fewer of their patients showed no response to treatment, with one participant indicating that 0% of their patients remain the same while engaged in psychotherapy with them.

A one-way ANOVA was conducted to compare the mean of self-assessed patient non-responder percentages for participants grouped by level of credential: Group 1 = Doctoral Level (n = 86, M = 27.34, SD = 14.72); 95% CI = [24.18, 30.49]. Group 2 = Master's Level (n = 207, M = 23.73, SD = 13.69); 95% CI = [21.85, 25.61]. Group 3 = Other (n = 12, M = 27.67, SD = 11.50); 95% CI = [20.36, 34.97]. The overall F examining clinician ratings for the one-way ANOVA was statistically non-significant, $F(2,302) = 2.288$, $p = 0.103$ This corresponded to an eta squared effect size = .01; that is, about 1% of the variance in self-assessed patient non-response percentage was predictable from the level of credential. This is an extremely small effect. In other words, while levels of credential produced different self-assessed patient non-responder ratings, no significant differences were found.

Hypothesis 5d: *Participants will, on average, underestimate the percentage of their patients that deteriorate as a result of being engaged in treatment.*

Descriptive statistics revealed that participants believed that the minority of their patients deteriorated as a result of being in psychotherapy. On average, participants reported that 7.29% (SD = 7.49) of their patients deteriorated due to being engaged in psychotherapy. The data set mode was 5%. 263 participants (86%) indicated that 10% or fewer of their patients deteriorate, with a range from 0% - 10%. 44 participants (14%) indicated that 15% - 50% of their patients

deteriorated while in psychotherapy with them. 59 participants (19%) reported that 0% of their patients deteriorated while in treatment.

A one-way ANOVA was conducted to compare the mean of self-assessed patient deterioration percentages for participants grouped by level of credential: Group 1 = Doctoral Level (n = 86, M = 7.08, SD = 5.35); 95% CI = [5.93, 8.23]. Group 2 = Master's Level (n = 206, M = 7.05, SD = 7.52); 95% CI = [6.01, 8.08]. Group 3 = Other (n = 13, M = 11.00, SD = 14.24); 95% CI = [2.40, 19.60]. The overall F examining clinician ratings for the one-way ANOVA was statistically non-significant, $F(2,302) = 1.777$, $p = 0.171$. This corresponded to an eta squared effect size = .01; that is, about 1% of the variance in self-assessed patient deterioration percentage was predictable from the level of credential. This is an extremely small effect. In other words, while levels of credential produced different self-assessed patient deterioration ratings, no significant differences were found.

5.2 Qualitative Results

Data Analysis Process. Qualitative data consisted of responses to three separate yet related open-ended questions regarding the utilization of routine outcome monitoring. These were questions 18, 19, and 20 within the online survey. It should be noted that each of these open-ended questions are both limited in scope and narrowly focused. In other words, the qualitative results do not stem from in-depth interviews regarding the phenomenon in question typical of more rigorous qualitative studies. That is, the following qualitative results do not meet the overall rigor of a "true" qualitative study and should be interpreted accordingly. For

example, responses to the questions typically consisted of either "one word" answers, a brief sentence description, or were left blank. In addition, due to the fact that the participant responses were solicited from an online survey, non-verbal behaviors cannot be reported. Although the identified themes seem to represent the participant responses, it should be noted that not every theme was represented in each participant response and that the results do not capture everything that the participants were hoping to convey. Despite these limitations, a phenomenological contextual approach to the qualitative data set was still determined to be appropriate. This type of data analysis allowed the researchers to explore the data from a stance of curiosity, and is a reflection of the subjectivities of both the researchers and participants intersecting to produce a shared meaning of the overall data set. The following section provides a description of the qualitative data analysis process.

The data was analyzed through implementing an adapted version of Bazeley's (2013) approach to phenomenological analysis. This approach involves a five-step interrelated process: 1) The data set is organized by general statements; 2) The data set is examined for central themes arising out of the general statements; 3) The central theme is interrogated in regards to the study question; 4) Each of the thematic statements are clustered together in order to further understand the essential themes; and 5) clusters are examined and integrated to produce a description of the investigated topic that is rooted in the context of the participant's lived experience.

Step 1, which involved organizing the data by general statements, was conducted by the lead researcher based on the type of responses provided by the participants. This initial process was largely driven by participant responses due to the fact that they were providing information following a "yes or no" question. That is, the qualitative data derived from the open ended questions of both 18 and 20 were already "naturally" categorized based on whether a participant answered "Yes or No." Upon completion of this step, the results were shared with an outside researcher who had received training in qualitative methods and is also familiar with the psychotherapy outcome literature base. This transitioned into the second step of the data analysis process, which consisted of examining the general statements for central themes. Using Microsoft Excel Spreadsheets, this step involved the creation of categories based on participant responses and the lead researcher's knowledge of the existing psychotherapy outcome literature. These central themes were then shared with the same outside researcher who previously reviewed the qualitative data. Next, the central thematic categories were interrogated in regards to why participants may or may not be utilizing routine outcome monitoring as part of their day-to-day practice of psychotherapy or within the process of clinical supervision. Themes resulting from this process are treated as sub-themes under the central theme categories. Again, the lead researcher initially conducted this process before sharing the preliminary results with the same aforementioned outside researcher. This interrogation procedure resulted in a refining of the central themes and produced a more comprehensive understanding and clustering of the essential themes (i.e. reasons of ROM use/non-use) originating

out of the data set (Step 4). Finally, the data analysis process culminated with Step 5, which involved examining and integrating the findings in order to provide a cohesive description of the overall data set under investigation.

Step 5, clearly draws upon the subjectivity of the researcher and therefore represents an inductive process. However, this appears to be consistent with most approaches to qualitative data analysis (Midgley, Holmes, Parkinson, Stapley, Eatough & Target, 2016). Additionally, careful notes were taken throughout the entire data analysis process in order to create a transparent audit trail that could be reviewed for further areas for research, refinements, and discrepancy resolution (Elliott, Fischer & Rennie, 1999; Bazeley, 2013). The following sections outline the results that emerged out of the qualitative data set. Additionally, the qualitative results are depicted in Table 27.

In regards to Questions 18 and 19, the findings are centered around two general statements: "Yes, I engage in routine outcome monitoring as part of my day to day practice of psychotherapy" and "No, I do not engage in routine outcome monitoring as part of my day to practice of psychotherapy." Following the above process, the findings are further organized into their central themes based on the reasons participants provided as to why they utilize ROM or do not, as part of their day-to-day practice of psychotherapy. For the participants who answered, "Yes" to the use of ROM as part of their day-to-day practice of psychotherapy, the central themes consist of "Yes-Utilization of Formal ROM tools/management systems" and "Yes-Utilization of Formal Symptom Inventories." Similarly, the participants who answered "No" to the use of ROM as part of their day-to-day practice of

psychotherapy are associated with central themes, which have been coded as "No-Active" and "No-Passive." Each theme is described in detail and relevant quotations from the participants are provided in order to further illustrate the underlying meaning of each thematic category. The following sections list the general statements (bolded), the associated central themes (italics), and the resulting sub-themes (italics).

General Statement: "Yes, I engage in routine outcome monitoring as part of my day to day practice of psychotherapy"

Central Theme 1: Utilization of a Formal Routine Outcome Monitoring Tool/Management System

Sub-theme 1a: Best Practice

Of the participants who chose to complete the open-ended question following Question 18 of the survey, 47 indicated that they use ROM as part of their day-to-day practice of psychotherapy and that they have implemented a formal ROM tool/management system within their practice. It was determined that these participants were utilizing "formal" ROM tools/management systems based on their responses to Question 19 of the survey which asked about the type of outcome monitoring tool/management system that they currently utilize. Based upon the knowledge of the lead researcher and the existing literature, ROM tools/management systems were considered to be "formal" if they were designed to be administered pre-/post therapy, at repeated intervals, and/or session to session within routine care through soliciting patient feedback (Castonguay et al., 2013). Additionally, the ROM tools/management systems must demonstrate acceptable

psychometric properties in regards to reliability, validity, and sensitivity to change (Ogles, 2013).

While there were a variety of formal ROM tools/management systems represented throughout the sample, the 3 most common were the PCOMS/FIT, OQ-Analyst 45/30, and the CCAPS. A list of the 10 most frequently endorsed formal ROM tools/management systems and 10 most frequently endorsed Treatment/Diagnosis specific outcome measures identified by therapists in the present study can be found in Table 28. Additionally, 22 participants indicated that the use of ROM tools/management system is a "best practice" and enhances the overall quality of their psychotherapy. One participant stated, "It greatly helps outcomes and helps me identify areas of growth as a practitioner." Another participant responded by stating, "I believe doing so is ethical, is consistent with practice-based evidence, aligns with my beliefs and values about clinical practice and with the research, and because I believe it makes me a more diligent therapist." Finally, one participant responded by saying, "Help[s] monitor alliance. I think it helps me be aware of blind spots as I work." Statements such as these seem to indicate that for these therapists, the use of ROM tools/management systems reveal they interpret the use of ROM tools/management systems as a component of "best practice" in regards to the practice of psychotherapy.

Sub-theme 1b: Agency Policy

Of the 47 participants who indicated the formal use of ROM tools/management system, 9 stated that they administer the measures due to "agency policy." Statements such as "(ROM tools/management systems)…are a

requirement of my employer," "(Are) required for school," and "(Monitoring) is built in to our agency's operation" were clustered together as part of the analysis process. These responses appear to suggest that the use of formal ROM tools/management systems are either components of the standard operating procedures of certain agencies and/or are required by the training programs to assist in the educational experience of their students.

Sub-theme 1c: No Reason Given

Finally, of the 47 who indicated the formal use of ROM tools/management system, 16 participants provided no information as to why they currently use ROM tools/management systems. The participants simply listed the type of ROM tool/management system they were currently utilizing as part of their day-to-day practice of psychotherapy. Again, a list of the top 10 most frequently endorsed formal ROM tools/management systems and 10 most frequently endorsed Treatment/Diagnosis specific outcome measures identified by therapists in the present study can be found in Table 28.

Central Theme 2: Utilization of a Formal Treatment/Diagnosis Specific Measure

Sub-theme 2a: Best Practice

Of the participants who chose to complete the open-ended question following Question 18 of the survey, 24 indicated that they use ROM as part of their day-to-day practice of psychotherapy and that they have implemented a formal symptom inventory within their practice. It was determined that these participants were utilizing "formal" Symptom Inventories based on their responses to Question

19 of the survey which asked about the type of outcome monitoring tool/management system that they currently utilize. Symptom Inventories were considered to be "formal" if they demonstrated acceptable psychometric properties in regards to reliability and validity (Ogles, 2013). While there were a variety of formal ROM tools/management systems represented throughout the sample, the 3 most common were the PHQ-9, BDI, and GAD-7. 16 participants indicated that their decision to use Symptom Inventories was due to their desire to be engaged in "best practice." One participant stated, "To measure progress, determine need to change treatment goals, ethical practice." Another participant responded by stating, "So the client and I can see if symptoms are decreasing and if they are meeting their therapeutic goals." Finally, one participant responded by simply stating, "Best Practice." As a result, similar to the therapists who have chosen to utilize formal ROM tools/management systems, it appears as if therapists who employ formal Symptom Inventories are also concerned about the "best practice" of psychotherapy.

Sub-theme 2b - Agency Policy

Of the 24 who indicated the formal use of Symptom Inventories, 8 stated that they administer the inventories due to "agency policy." Participants provided responses such as, "State and grant requirements," "Only for certain clients, as required by third party payors," and "Required by [Name of Agency/Organization]." These responses appear to suggest that the use of formal Symptom Inventories are either required by the agency itself or by funding sources (health insurance, grants, etc.) that the agency relies upon.

Sub-theme 2c - No Reason Given

Finally, of the 24 who indicated the use of formal Symptom Inventories, 5 participants provided no information as to why they utilize the inventories. The participants simply listed the type of Symptom Inventory they were currently utilizing as part of their day-to-day practice of psychotherapy. Interestingly, one participant responded with asking, "Are outcome monitoring tools the same as symptom assessment instruments?" which suggests a lack of clarity or understanding regarding the differences between an outcome measure and a symptom inventory.

General Statement 2: "No, I do not engage in routine outcome monitoring as part of my day to day practice of psychotherapy"

Central Theme 1: Active non-use of ROM tool/management system

Sub-theme 1a: No Time

Of the participants who chose to complete the open-ended question following Question 18 of the survey, 127 indicated that they do not use ROM as part of their day-to-day practice of psychotherapy. These results are coded as participants "actively" choosing not to use ROM tools/management systems based on their responses. That is, their responses suggest that the participants possess at least some level of knowledge regarding outcome monitoring but are actively choosing not to implement ROM tools/management systems within their practices. The most common reason that participants provided for the non-use of ROM tools/management systems was centered on the theme coded as "No time." 23 participants provided various reasons that suggested that their practice context

does not allow for enough time to implement ROM tools/management systems. One participant stated, "No time other than immediate observation; too many factors to track. Gotta make money." Another participant responded by stating, "Found forms to be time consuming," while another participant reported, "It is an area that I would like to be more engaged but currently do not have the tools and/or staff to manage the day to day operations as well as adding in a monitoring component." Finally, one participant simply stated, "No time." It appears that this particular group of therapists seems to be aware of outcome monitoring, but due to time constraints commonly associated with providing clinical services, have actively chosen to forgo the use of ROM tools/management systems at this time.

Sub-theme 1b: No Benefit

The second most common reason participants provided regarding the active decision to not use ROM tools/management systems were coded as "No benefit." 18 participants provided various reasons that suggested they did not perceive any benefit of utilizing ROM tools/management system as part of their day-to-day practice of psychotherapy. One participant stated, "Do not see it as being very valuable for my practice at this time." Another participant responded by stating, "I found that it became more cumbersome and less helpful over time with long term clients which is the majority of my caseload." Other participants provided responses such as, "I don't think they are necessary," "Never felt the need to," and "Don't see the benefit in my practice." Overall, the responses suggest a conscious decision to not use ROM tools/management systems and a lack of understanding

and/or belief that implementing outcome monitoring into their practices would actually produce meaningful benefits.

Sub-theme 1c: No Policy

Fifteen participants reported that their agency does not have an active policy that specifically requires the use of ROM tools/management systems. This theme was captured through responses such as, "It is not done routinely where I am working," and "It is not required or encouraged by supervisor at my practicum sites in general." Other statements which included, "I suppose because I am not required for reimbursement," "My last site allowed it while my current practicum site does not," and "Not required" seem to suggest that if there were some external reason (supervisor requirement, monetary incentive, agency policy, etc.) to monitor outcome, then these therapists might consider implementing ROM tools/management systems as a component of their practices. However, for this group of therapists there currently is no policy that explicitly requires them to engage in routine outcome monitoring, which has resulted in the lack of use.

Sub-themes 1d: No Right Tool

The final theme that emerged from the open-ended responses suggested that ROM tools were either insufficient or inappropriate for their practices. 7 participants reported being unsure which measure to use and/or concerns about the types of ROM tools currently available. These themes were reflected in responses such as, "Haven't found one that felt natural and easy-flowing as opposed to too structured and formal," and "Not aware of an outcome tool for EFT."

Sub-theme 1e: Other

Other reasons that were provided for not utilizing ROM tools/management systems included, "Brief therapy in hospital system does not allow for monitoring after our interaction, it then goes to outpatient clinicians," while another participant responded by saying, "Don't want to put any pressure on clients." Interestingly, of the 127 participants who answered "No" to the use of ROM tools/management systems and provided accompanying qualitative reasons, only 3 therapists provided responses that seemed to suggest that they are hoping to implement outcome monitoring in the future. This was captured through their responses that stated, "I would really like to. Haven't figured out how to do it routinely," "[No,] But I am working on it," and "System not yet in place." Finally, it should be noted that 64 participants answered "No" to the use of ROM tools/management systems as part of their day-to-day practice of psychotherapy and chose not to provide any information through the follow up open-ended question.

Central Theme 2: Passive non-use of ROM tool/management system

Sub-theme 2a: No Knowledge

Twenty-two the participants who indicated that they do not use ROM as part of their day-to-day practice of psychotherapy were coded as participants "passively" choosing not to use ROM tools/management systems based on their responses. This code was developed based on participant responses that suggested therapists were not using ROM tools/management systems due to either a lack of knowledge or lack of training. In other words, there appeared to be a qualitative difference between participants who seemed to be aware of outcome monitoring but were choosing to

actively exclude the use of ROM tools/management systems from their daily practices, versus participants who seemed simply unaware of what ROM tools/management systems are and how they might be utilized within the process of psychotherapy. Thus, when considering this "passive" approach to the non-use of ROM tools/management systems, the most common reason that participants were not tracking their outcome was coded as "No knowledge." 18 participants provided responses that suggested that they were unsure or unfamiliar with outcome monitoring tools. Statement such as, "Not sure what outcome monitoring means," "Not sure what outcome monitoring tools consist of," and "I am not entirely sure what this means…" seem to reveal an overall general sense of uncertainty in regards to ROM tools/management systems. Additional responses that appeared to support the theme of "No knowledge" included, "Lack of familiarity with a tool I would find useful," "I am not familiar with the tools or methods to do outcome monitoring," and "Not sure what is available?" Finally, answers such as, "Never thought of doing so" and "Haven't thought about it" suggest that some therapists simply have not yet considered the use of outcome monitoring. Finally, one participant simply stated, "No time." It appears that this particular group of therapists seems to be unaware of both the overall rationale and function of routine outcome monitoring.

Sub-theme 2b: No Training

The remaining 4 participants who answered "No" to the use of ROM tools/management systems as part of their day-to-day practice of psychotherapy and provided qualitative responses were coded around the theme of "No Training." This theme was derived from answers that included, "I have received very little

training in this and there has been no expectation that this is done in day-to-day practice," "Never encouraged to use it in supervision or school," and "It has not been part of my training." These types of responses appear to suggest that these therapists did not receive any type of formalized training in regards to ROM tools/management systems.

General Statement: "Yes, I engage in routine outcome monitoring as part of my day to day practice of psychotherapy"

Central Theme 1: Informal Outcome Monitoring

Sub-theme 1a: Best Practice

Forty-four participants answered, "Yes" to the practice of outcome monitoring as part of their daily practice of psychotherapy, but indicated the use of an "informal" outcome-monitoring tool. Recall that a "formal" ROM tool/management system is designed to be administered pre-/post therapy, at repeated intervals, and/or session to session within routine care through soliciting patient feedback (Castonguay et al., 2013). Additionally, "formal" ROM tools/management systems must demonstrate acceptable psychometric properties in regards to reliability, validity, and sensitivity to change (Ogles, 2013). As such, the participant responses coded around this theme suggest that therapists are routinely monitoring their patient outcome, but have chosen not to implement a "formalized" ROM tool/management system or a "formalized" symptom inventory. For instance, one participant shared, "I have been trained to use the OQ-45 but that is not what is currently used at the private practice group I work in and that the Electronic Medical Record System is currently being treated as an outcome tool but

that it is 'not meant as outcome tool'." This statement seems to suggest that this therapist understands the difference between formal and informal ROM tools/management systems. Additionally, based on the data set, the most common "informal" outcome monitoring procedures consisted of in-person feedback (self-reports of functioning, rating scales/assessments, pre/post follow up calls) and treatment planning/goal setting. In short, it appears as if these therapists are predominantly relying on verbal feedback from their patients versus requiring them to complete a "formal" outcome measure and/or symptom inventory.

Eighteen participants stated that they have employed an informal method of monitoring patient outcome primarily motivated by "Best Practice." This was demonstrated through responses such as, "Outcome monitoring helps drive practice, effective treatment and monitor patient success," "I use the client's feedback to redirect treatment as needed," and "to ensure the benefit of counseling." These reasons are similar to those provided by therapists utilizing formal ROM tools/management systems. One participant stated "Monitoring outcomes is important to ensure results in the psychotherapeutic modality" and this is accomplished through "Intrinsic measuring through my vast experience."

Sub-theme 1b: Agency Policy

Of the 44 participants who indicated informal outcome monitoring, 5 stated that they engage in the process due to "Agency Policy." Statements such as, "It is built in my electronic health records system," and "[it] is a state requirement for substance abuse treatment centers in [state name withheld]" reflect that informal

outcome monitoring is an element of routine practice because of agency and/or other external policies that influenced the provision of therapy services.

Sub-theme 1c: Informal Outcome Monitoring: Blank

Twenty-one participants indicated that they engage in informal outcome monitoring but provided no information in regards to the motivation behind their decision to monitor patient progress.

General Statement: "No, I do not engage in routine outcome monitoring as part of my day to day practice of psychotherapy"

Central Theme 1: Informal Outcome Monitoring

Sub-theme 1a: No Specific Reason Given

Of the 40 participants who responded to this item, 33 indicated that they do not use a "formal" ROM tool/management system, but did indicate that they have implemented some form of informal outcome monitoring. Again, this suggests that this group of therapists understand that there is a difference between "formally" tracking outcome and what they are currently utilizing to track patient progress. As in the previous section, these responses were coded as "informal outcome monitoring" due to the fact that this group of participants seems to understand that they are not utilizing a formal ROM tool/management system or symptom inventory. This was evidenced through responses such as, "Nothing formal, via discussion with clients," "Use informal and subjective assessments of progress," and "I do casual check in with clients, not formal assessments." Additionally, similar to the participants who answered "Yes" to this same item and indicated an informal

outcome monitoring process, verbal self reports and check-ins with patients were the most commonly utilized form of informal outcome monitoring. This was reflected through statements such as, "I engage in frequent outcome monitoring with self-report and comparison to other clients experiencing similar circumstances, but I do not compare to standardized instrument," "I don't, beyond verbal check ins;" and "At the start of the session, I ask about symptoms, use a 'scale'; ask better-worse-same; I don't use a standardized outcome form of any kind."

While these participants failed to provide any specific reasoning as to why they engage their patients in an informal outcome monitoring process. It is possible to infer that this group of therapists informally monitors their outcome in hopes of providing better patient care. This can be seen through one response that stated, "My approach is more informal, as I find from conversations with clients I can assess their success or if we need to change treatment strategies." However, the responses falling within this particular central theme simply provided a description of how they informally track patient progress and lacked the specific information clarifying their motivation behind their decision to informally monitor patient outcome. Finally, It should be noted that at least 4 of the responses on this item were due to the fact that participants are not tracking their outcome on a day-to-day basis, but solicit patient feedback at different time intervals (i.e., monthly). However, regardless of how, why, or when, it appears that there are some therapists who are monitoring their patient outcome through an informal process that typically consists of verbal patient feedback.

Sub-theme 1b: No Benefit, No Policy, No Time, No Money

Of the remaining 7 participants who answered "No" to the use of routine outcome monitoring as part of their day to day practice of psychotherapy, 3 participants stated that they do not formally track their outcome because they do not perceive any benefit ("I haven't seen benefit beyond a verbally reported analysis," "Patients provide it in person, data doesn't give full picture," "Busy, value client's input through talk therapy over tool"). Other reasons given for not routinely monitoring outcome suggested "No Policy" (Not sure what you mean by this question. There are measure[s] we can use to monitor outcomes but are not required to at my site, but we can also monitor outcomes based on clients meeting goals of therapy, parenting…"), "No Time" ("I engage in monthly ROM. I do not engage in daily because paper and pencil collection is cumbersome on daily basis."), "No Money" ("The cost to implement routine structured outcome monitoring tools is a concern. I rely on my clinical observations/judgment and client's self-report to evaluate treatment progress."), and "No Knowledge" ("I don't use formal outcome monitoring because I am not aware of it. I do have clients check in on a 1-5 scale of how they are doing and keep track of their present level of functioning."). Thus, it appears as if therapists have specific reasons for not utilizing formal ROM tools/management systems as part of their day-to-day practice of psychotherapy.

ROM use and clinical supervision

Question 20 of the online survey asked, "If you do engage in routine outcome monitoring, do you discuss outcome results during supervision with your supervisor? If yes, why? If no, why not?" Results were coded under two general

statement based on "Yes or No" responses and then were further refined through the identification of central themes derived from the subsequent answers to the why or why not component of the questions. It should be noted that 9 participants who answered this question stated that they do not engage in routine outcome monitoring. As such, it is possible that these participants also responded "No" to question 18 and were simply being consistent with their responses.

General Statement: Yes, I engage in routine outcome monitoring, and I discuss the results with my supervisor.

Central Theme 1: Explore Treatment Progress

Thirty-three participants indicated that they routinely track their outcome and discuss the results during the process of supervision. Results suggested that these therapists utilize the discussion of their outcome results to track patient progress and to determine if treatment needs to be adjusted. This was reflected through statement such as, "Because it helps to define trends of progress or lack of improvement," "Provides a record of trajectory of symptoms," and "To interpret the results and/or collaborate on directions to take with the patient in the future (e.g., evaluate if current approach is appropriate)." Clearly, it appears as if this group of therapists understand not only the importance of outcome monitoring but also believe discussing their outcome results with their supervisor will result in better overall treatment. One participant wrote, "I feel that it is important to monitor my patients' progress (or lack thereof) so that I might better understand the ways that I need to improve in session. Additionally, outcome measures are especially helpful for me in understanding the patient's current context and current struggles. I can

talk about each case with my supervisor to determine the best course of action for my patients." Another participant provided this response, "It is my job to make sure that my clients are meeting the goals and objectives laid out in their treatment plans and my supervisor gives me clinically relevant advice to ensure this happens." Taken together, it appears that there are some therapists who believe that routine outcome monitoring should be a part of the process of clinical supervision in an effort to ensure proper patient care.

Additionally, there were 7 participants who responded that they discuss their outcome results with their supervisor in hopes of receiving "feedback." However, they did not explicitly state why receiving feedback about their outcome results was important (i.e., patient progress, treatment planning, etc.). It can perhaps be reasonably assumed that supervisees are seeking feedback about their outcome in hopes of preventing patient deterioration or improving treatment in some manner, but the lack of specificity regarding their responses makes it difficult to determine exactly why they discuss their results during supervision. This assumption, however, is what prompted the researchers to include these participants in this group of therapists versus creating a separate thematic category.

General Statement: Yes, I engage in routine outcome monitoring, but I do not discuss the results with my supervisor.

Central Theme 1: No Supervisor

Fifty-one participants indicated that while they engage in routine outcome monitoring, they do not discuss the results with a supervisor. This is mainly due to

the fact that this group of participants is no longer engaged in clinical supervision at this point in their careers. This was revealed through responses such as, "I am licensed and require no supervision," "Not applicable, licensed, not receiving supervision," and "I am the clinical supervisor in my practice. I do receive consultation, but not supervision." However, one participant stated, "I discuss with my supervisees," which seems to suggest that this therapist believes there are benefits to discussing outcome results during the process of clinical supervision. Simply put, it appears as if the majority of therapists within the sample are no longer being supervised which by default means they are not discussing outcome results with a supervisor.

Central Theme 2: No Need

The next theme associated with the particular data set suggested that participants do not feel a need to discuss their supervisor. Participants stated, "Not unless there was some reason to do so. Never had it happen" and "I discuss my concerns about the client," and "Not what I use supervision for and have 99% retention so I must be doing something right." Based on these responses, it appears that while therapists are in fact routinely monitoring their outcome, they see no need to discuss the results during supervision and/or utilize the supervision process to address other treatment-related concerns.

Central Theme 3: Other

The remaining participants who provided responses to this item suggested that they do not discuss outcome results with their supervisor for a variety of

reasons. Two stated that they receive treatment-specific supervision ("Supervision is strictly related to EMDR, outcome results discussed, not Q30," My supervision is monthly, related to EMDR certification"), one identified a lack of time to discuss results during supervision ("There is a limited amount of time to discuss these measures"), one indicated infrequent supervision ("My supervisor is out of town on company business 3/4 of the time. I've gone as long as 6-months with no supervision"), and one suggested that outcome results are not discussed because it is not required ("Not required to give it, but if I was I would be discussing it"). While these responses clearly represent minority reasons, they still provide qualitative insight into why therapists chose not to discuss their outcome results during the process of clinical supervision.

Table 27

Qualitative Results: ROM Users vs. Non-users

General Statement 1:		General Statement 2:	
Yes, I engage in ROM in my daily practice		No, I do not engage in ROM in daily practice	
Central Theme 1:		Central Theme 1:	
Utilization of formal ROM tools		Active non-use of ROM	
Subthemes:	Example:	Subthemes:	Example:
Best Practice (22)	"I believe doing so is ethical, is consistent with practice-based evidence, aligns with my beliefs and values about clinical practice and with the research, and because I believe it makes me a more diligent therapist."	No time (23)	"No time other than immediate observation; too many factors to track. Gotta make money."
No reason given (16)		No Benefit (18)	"Do not see it as being very valuable for my practice at this time."
Agency Policy (9)	"A requirement of my employer."	No Policy (15)	"I suppose because I am not required for reimbursement."
		No Right Tool (7)	"Haven't found one that felt natural and easy flowing as opposed to too structured and formal."

Qualitative Results: ROM Users vs. Non-Users (continued)

General Statement 1:		General Statement 2:	
Yes, I engage in ROM in my daily practice		No, I do not engage in ROM in daily practice	
Central Theme 1:		Central Theme 1:	
Utilization of formal ROM tools		Active non-use of ROM	
Subthemes:	Example:	Subthemes:	Example:
		Other (4) No reason given (64)	"Don't want to put any pressure on clients.
Central Theme 2:		Central Theme 2:	
Utilization of Formal Tx/Dx Specific Measures		Passive non-use of ROM	
Subthemes:	Example:	Subthemes:	Example:
Best Practice (16)	"To measure progress, determine need to change treatment goals, ethical practice."	No Knowledge (18)	"Not sure what outcome monitoring means."
Agency Policy (8)	"State and grant requirements."	No Training (4)	"I have received very little training in this and there has been no expectation that this is done in day-to-day practice."
No reason given (5)			

Qualitative Results: ROM Users vs. Non-users (continued)

General Statement 1:		General Statement 2:	
Yes, I engage in ROM in my daily practice		No, I do not engage in ROM in daily practice	
Central Theme 3:		Central Theme 3:	
Utilization of informal ROM		Utilization of Informal ROM	
Subthemes:	Example:	Subthemes:	
Best Practice (18)	"Outcome monitoring helps drive practice, effective treatment, and monitor patient success."	No reason given (33)	
		No Benefit, No Policy, No Time, No Money (7)	"I engage in monthly ROM. I do not engage in daily because paper and pencil collection is cumbersome on daily basis."
Agency Policy (5)	"It is a state requirement…"		"The cost to implement routine structured outcome monitoring tools is a concern. I rely on my clinical observations/judgment and client's self report to evaluate treatment progress."
Blank (21)			

Table 28

Most Frequently Represented Formal ROM Tool/Management Systems and Formal Treatment/Diagnosis Specific Measures

Formal ROM tool/system	Frequency	Formal Treatment/Diagnosis Measure	Frequency
Outcome Rating Scale/Session Rating Scale	12	Patient Health Questionnaire-9	9
Outcome Questionnaire 45/30	11	Generalized Anxiety Disorder-7	8
Counseling Center Assessment of Psychological Symptoms	7	Corporate Social Responsibility	5
Feedback Informed Treatment	3	Beck Depression Inventory 1&2	5
Partners for Change Outcome Management System	2	BECK	3
Behavioral Health Data Portal	2	Beck Anxiety Inventory	3
Youth Outcome Questionnaire	2	Posttraumatic Stress Disorder Checklist-5	3
Human Development Index	2	Client satisfaction questionnaire	2
CORE Outcome Measure	2	Child and Adolescent Service Intensity Instrument	1
		Strengths and Difficulties Questionnaire	1

Chapter 6 Discussion

"Yes, It Is Time for Clinicians to Routinely Monitor Treatment Outcome"

-Dr. Michael J. Lambert, 2010

The purpose of the study was to explore potential relationships between a therapist's decision to use routine outcome monitoring tools/management systems, deliberate practice, and clinical supervision. Multiple hypotheses were proposed in an effort to examine the overall use of ROM tools/management systems and how their utilization may, or may not, intersect with deliberate practice and the process of clinical supervision. These hypotheses were based on the available literature and were designed to hopefully capture information that would be useful to therapists who are actively providing psychotherapy. While not all findings were significant, important results still emerged from the data set. The following sections are meant to provide a comprehensive discussion of the subsequent results in hopes of informing ongoing clinical practice. Additionally, in an effort to organize the discussion of findings in a coherent manner, results are being presented in two ways. First, ROM users versus Non-users will be discussed. The type of specific comparison will be denoted in the heading. Second, ROM users versus Non-users who discuss their results during the process of clinical supervision will be discussed. Appropriate headings will be provided for clarity. Again, the appropriate adjusted alpha level determined the significant findings discussed within following sections.

6.1 ROM Users vs. Non-users: General Comparisons

When considering the findings comparing ROM users versus non-users and bearing in mind the previous discussion about sample representativeness, it perhaps is interesting to note that only one of the variables measured in both the Cook et al., 2010 study and current study resulted in a statistically significant relationship. That is, none of the demographic variables, which included age, ethnicity, gender, primary language, and/or theoretical orientation, produced statistically significant relationships when exploring why therapists might chose to use or not use ROM tools/management systems.

Additionally, the level of credential (i.e. Doctoral, Master's, Other), approximate total case load, approximate number of patients seen each day, the total number of therapists providing services at a location, total hours of supervision received each week, and the approximate amount of money therapists would be willing to pay for ROM tools/management systems are not statistically associated with ROM use. Finally, the approximate total number of years providing therapy also did not result in a statistically significant relationship when strictly comparing ROM users to non-users. In fact, clinical experience or approximate total number of years practicing resulted in basically identical averages for both ROM users and non-users. In short, only two of the observed variables from the present study resulted in statistically significant findings at an adjusted alpha level. While those findings will be discussed in later sections, the lack of statistical significance amongst the demographic variables suggests that the use versus non-use of routine

outcome monitoring tools/management systems is perhaps influenced by other factors associated with the practice of psychotherapy.

6.2 ROM Users vs. Non-users: Self-reflection and Insight

Therapist's perceived levels of self-reflection and insight were assessed through the use of the Self-Reflection and Insight Scale (SRIS). Self-reflection is defined as the "inspection and evaluation of one's thoughts, feelings, and behaviors" (Grant, Franklin & Langford, 2002, p. 821). The SRIS assesses self-reflection through two different domains, one being an individual's motive or "need for self-reflection" and the other capturing the process of "engagement in self-reflection" (Roberts & Stark, 2008). Insight, which has been operationalized as, "the clarity of understanding of one's thoughts, feelings, and behaviors is the third domain captured through the SRIS (Grant, Franklin & Langford, 2002). The developers of the SRIS believe that the constructs of self-reflection and insight are fundamental when hoping to evaluate an individual's ability to make purposeful and deliberate changes in their behavior (Grant, Franklin & Langford, 2002). Thus, it was hypothesized that the therapists who routinely monitor their outcome would display higher levels of self-reflection and insight versus their colleagues who have chosen not to implement ROM tools/management systems (Hypothesis 3).

However, the only significant difference between ROM tools/management systems users versus non-users was observed in regards to the Need for Self-reflection subscale. The mean score for ROM tools/management users was 31.16 and the mean score for ROM tools/management non-users was 29.95. This domain carries a

maximum score of 36. While it appears that all therapists included in the study are motivated toward self-reflection, the difference between ROM tools/management users versus non-users is statistically significant and produced a rather large effect size (d=.59). As this domain hopes to capture an individual's motivation to think about their thoughts, feelings, and behaviors, results suggest that the therapists who routinely monitor their outcome feel a stronger need to be self-reflective than their colleagues who do not monitor their outcome. This is an interesting and perhaps crucial finding of the present study.

While it seems as if therapists in general have a tendency to perceive self-reflection and insight favorably, not all therapists may feel the same level of motivation or need to actually engage in the process of self-reflection. Consequently, if some therapists do not feel overly motivated to engage in self-reflection, perhaps they will be less likely to implement the use of ROM tools/management systems within their day-to-day practice of psychotherapy. It is possible that this finding is related to other results from the current study that suggest agency policies, or external motivating factors, are related to use of routine outcome monitoring tools/management systems. Future studies should examine why some therapists feel a stronger need to engage in the process of self-reflection and the variables associated with that mentality.

Although only one of the SRIS domains revealed a statistically significant relationship between a therapist's decision to use or not use ROM tools/management systems, the results seem to indicate that therapists perceive a high need for self-refection, are highly engaged in the process of self-reflection, and

possess high levels of insight in regards to their personal thoughts, feelings, and behaviors. This can be inferred by comparing the mean scores to the domain maximum value score both of which were previously described in Table 25. Clearly, all of the domain mean scores fall within 2-6 points of each of the respective domain maximum value scores. As such, it can be reasonably assumed that therapists within the current sample demonstrate favorable attitudes toward the processes of developing self-reflection and insight. While the Need for Self-refection produced a significant difference, overall the results appear to suggest that ROM users and non-users seem to demonstrate extremely similar levels of self-reflection and insight.

6.3 ROM Users vs. Non-users: Sample Prevalence Rate

Hypothesis 1a specifically sought to explore the use of ROM tools/management systems within the entire sample (n=318). As predicted, results suggested that the majority of therapists do not utilize any type of formal routine outcome monitoring (Hypothesis 1a). In fact, only 38.99% (n=124) of the sample reported the use of outcome monitoring as part of their day-to-day practice of psychotherapy. While this rate of ROM use is much higher than the 29% observed in 1998 by Phelps, Eisman, and Kohout, it is surprisingly similar to that of a study conducted by Hatfield and Ogles published in 2004. In their study, they discovered that approximately 37% of practicing psychologists endorsed the use of routine outcome monitoring (Hatfield & Ogles, 2004). Interestingly, their rate of 37% seems to match the endorsed rate of ROM use within the present sample of 38.99%. These similar findings are compelling for a couple of reasons. First, the 2004 Hatfield and

Ogles study reported an *n* of 874. However, despite having a sample size of almost three times that of the present study, the overall reported rate of routine outcome monitoring was essentially the same when compared to the rate of ROM use within the current data set. Second, the Hatfield and Ogles study was published in 2004, suggesting that the use of ROM tools/management systems have effectively remained unchanged for over 10 years despite the ongoing research in the field of psychotherapy outcome. Combined, these findings suggest that the majority of practicing therapists are not utilizing a formalized method of monitoring their outcome, and there has been essentially no increase in the overall use of ROM tools/management systems by therapists who are currently practicing. While the current study was not intended to be a replication study, it has revealed a rather discouraging trend in regards to the current use of ROM tools/management systems.

6.4 Reasons Therapists Use ROM Tools/Management Systems

While the rate of ROM use was found to be 38.99% for the current sample, it appears to be moderated by the type of clinical settings that employ therapists. In other words, it appears that the type of clinical setting is associated with a therapist's decision to use or not use ROM tools/management systems. This result stems from the fact that statistical analyses examining ROM use and clinical setting produced significant findings. Indeed, the top three clinical settings represented within the sample were private practice settings (69.5%), community mental health centers (9.4%), and university counseling centers (5%). Comprehensive results are

reported earlier in the study and can be quickly referenced in Table 1. These results suggest that while private practice settings comprise the majority of the sample, most of the therapists in those settings are not using ROM tools/management systems as part of their daily practices of psychotherapy. Conversely, therapists within an institutionalized setting, while less represented within the overall sample, reveal a higher rate of ROM use. Moreover, follow up analyses examining ROM use and clinical setting coded as private practice versus institutionalized, produced significant results at the $p = .000$ level. Accordingly, the comparisons produce nearly opposite rates of ROM non-use versus ROM use when private practice and institutionalized settings are compared side by side (Private Practice: 69 vs. 31%; Institutionalized: 39 vs. 60%, respectively). These findings match previously published results by Hatfield and Ogles (2007) where they also discovered a higher rate of ROM use in institutionalized settings. Combined, these results provide strong evidence that the type of clinical setting where a therapist chooses to work will most likely influence practice decisions regarding ROM use/non-use.

In addition to clinical setting being associated with ROM use, results of the current study identified another variable that was significantly associated with whether or not a therapist endorsed utilizing ROM tools/management systems. A statistically-significant relationship was observed regarding whether or not therapists were required to utilize ROM tools/management systems as part of their clinical training. This finding appears to suggest that the type of requirements surrounding the training and education of therapists has the ability to influence future decisions about their clinical work. That is, if therapists were required to use

ROM tools/management systems during their training or after their clinical training had ended, they were more likely to continue monitoring their outcome. Moreover, if therapists were required to use ROM tools/management systems both during and after their clinical training had concluded, they were even more likely to be currently using ROM tools/management systems. Research discussed earlier in the literature review also found that therapists who received formalized training with outcome measures seem to demonstrate more openness toward the use of ROM tools/management systems (Smits et al., 2015). Simply put, the more required use of ROM tools/management systems, the greater the likelihood therapists will continue to rely on outcome monitoring to inform their services.

These results appear to be supported by the qualitative responses that indicated some of the therapists within the sample utilize ROM tools/management systems because it is required by their training program. These findings, in part, may stem from specific guidelines developed by accrediting bodies and professional associations charged with overseeing the training and education of therapists. For example, the American Psychological Association (2013), Commission on Accreditation, Implementing Regulation C-24 states that trainees in APA accredited programs should be "provided with supervised experience in collecting quantitative outcome data on the psychological services they provide…" (p.75). Thus, it appears that policies specifically requiring the use of ROM tools/management systems seem to influence a therapist's decision to monitor patient outcome even after formal training has been completed. These results seem to align with previous findings published by Hatfield and Ogles (2004) who concluded that therapists who choose

to utilize outcome measures have received a "substantial amount of training in the use and implementation of outcome-assessment strategies" (p. 490).

The qualitative results provide additional information for understanding why some therapists have chosen to incorporate routine outcome monitoring into their day-to-day practices of psychotherapy. Most importantly, the qualitative data suggests that for the therapists who do routinely track their outcome, they do so in order to monitor patient progress and ensure quality care. This is encouraging based on the literature that providing feedback to therapists reduces treatment failure (Whipple & Lambert, 2011). However, despite this aspirational approach toward patient care, it is complicated when set against the other data derived from the current study. For instance, ROM tool/management system use also seems to be related to whether or not a site has developed a specific policy that explicitly requires the use of ROM tools/management systems. The presence or lack of an agency policy requiring the use of ROM tools/management systems appeared in the qualitative responses for why therapists use ROM tools/management systems/symptom inventories, and why they do not routinely track their outcome. Thus, when combined with the finding that suggests therapists practicing within institutionalized settings tend to utilize ROM tools/management systems, it appears institutionalized settings might be more likely to have a specific policy regarding the use of ROM tools/management systems. This could certainly be the case for community mental health centers and university counseling centers, which were both represented in the top three types of clinical settings, and frequently have a standard set of procedures and policies determining day to day operations.

The qualitative data also suggested why certain institutionalized settings might have developed a specific policy regarding ROM tools/management systems. Reliance on external funding was a top reason that therapists cited for tracking their patient outcome. This clearly indicates the presence of an agency policy that is directly linked to income. Hence, the higher rates of ROM tools/management use within institutionalized settings not only suggest a policy requiring the use of ROM, but that it might also be financially motivated. Thus, larger clinical settings might have a greater need for administrative policies, such as requiring ROM use, to ensure the quality of their services and maintain funding sources (Boswell, Kraus, Miller & Lambert, 2015). These types of policies seem to match previously published reasons regarding why managed care facilities and other institutionalized settings, which are concerned with cost effectiveness and quality assurance protocols, rely on outcome monitoring as part of their decision making surrounding the provision of health care services (Brown et al., 2001; Brown & Jones, 2005). Additionally, these findings also seem to reinforce the results of De Jong and De Geode (2015) where they determined that therapist-organization fit significantly influences the overall use of ROM tools/management systems. That is, if therapists choose to work for an organization/institution that requires the use of ROM, they are likely doing so, in part, because they are willing to abide by their specific policies and procedures.

Thus, we are now faced with a rather interesting set of conclusions. Results discussed within the preceding section suggest that therapists working within institutionalized settings are more likely to endorse the use of ROM

tools/management systems as opposed to their colleagues in private practice settings. However, the reasons for this discrepancy seem to be unclear. For instance, is ROM use due to the fact that therapists within institutionalized settings have received previous and/or current ROM training and therefore continue to rely on ROM as licensed therapists? Or are therapists who practice in institutionalized settings simply following the administrative policies that require ROM tool/management system use? It could also be that therapists who choose to engage in routine outcome monitoring are committed to "best practice" in an effort to ensure quality care for their patients. It could also be a combination of all of the aforementioned variables. Unfortunately, the current study does not reveal a clear answer to this question.

However, other studies have attempted to explore these types of questions/confounds. In their 2007 study, Hatfield and Ogles also examined the reasons why therapists chose to utilize outcome measures. In their findings they state the following, "If a psychologist in a solo or group private practice were to be asked why they use outcome measures they would most likely answer for treatment purposes, while a psychologist working in an institutionalized setting would say that they use outcome measures for treatment purposes first *and* business related reasons also." (Hatfield & Ogles, 2007, p. 289). They go on to point out that "business related reasons" mainly relate to how therapists get paid for their services (managed care/insurance companies) (Hatfield & Ogles, 2007). Again, it appears as if therapists who work in larger (institutionalized) settings might have an agency policy regarding ROM tools/management systems based on how they maintain their

funding sources. Therefore, it appears that while previous training might be associated with higher rates of ROM use, it seems agency polices that specifically require therapists to utilize ROM tools/management systems might be the most influential. Thus, while most therapists are perhaps interested in engaging in "best practice" regarding their psychotherapy, the inclusion of ROM tools/management systems within their daily provision of therapy services may only be implemented if there is an additional administrative policy explicitly requiring the use of ROM tools/management systems.

6.5 Reasons Therapists Do Not Use ROM Tools/Management Systems

While many of the quantitative variables failed to explain the lack of use of ROM tools/management systems, the qualitative data appears to provide at least some of the reasons why many therapists refuse to incorporate routine outcome monitoring into their daily practices of psychotherapy. Reasons such as not having enough time, not being able to locate an appropriate outcome measure for their type of practice, and no overarching organizational/agency policy requiring the use of ROM tools/management systems, suggests that many therapists are actively choosing not to formally monitor their patient progress. Moreover, many therapists have chosen not to incorporate formal ROM tools/management systems into their practices due to lack of knowledge, lack of training, and not perceiving any benefit of monitoring patient outcome. These results are similar to those found by Hatfield and Ogles (2007) who published findings that many psychologists do not engage in

outcome assessment because they find it impractical and are unsure about the utility.

Of note, non-significant findings were observed in regards to practice location (urban vs. rural). Closer examination of the data is necessary when discussing these particular findings. Rural locations typically do not possess the same access and amount of resources that are more commonly available within urban settings. (Stamm et al., 2003) This point is certainly valid when considering the cost and resources that might be associated with certain ROM tools/management systems. Indeed, to ensure optimal results some ROM tools/management systems can be expensive, require specific technology, and rely on a stable Internet connection. However, not every outcome monitoring tool/management system requires a significant amount of resources in regards to cost and/or time. For example, the Partners for Change Outcome Management Systems (PCOMS) is a relatively simple paper and pencil outcome monitoring tool that possesses adequate psychometric properties, is simple to administer, and provides valuable real time feedback about a course of treatment (Miller, Duncan, Sorrell & Brown, 2005). In short, researchers have worked diligently to provide therapists with a variety of formal outcome measures that can be used in various clinical contexts with little cost to practicing clinicians. Again, however, while implementing routine outcome monitoring might be readily accessible and inexpensive, those reasons do not appear to be more significant than previous training and/or an agency policy specifically requiring the use of ROM tools/management systems.

Finally, the specific amount of money therapists choose to spend on ROM tools/management systems did not result in a statistically significant relationship. Despite the non-significant findings, this is one noteworthy observation when considering the previous findings suggesting financial motivation to utilize ROM tools/management systems. Based on the data set, it is difficult to determine the funding source (therapist money versus agency money) and /or if ROM tools/management systems would be utilized if they were provided free of charge. Indeed, 260 therapists who completed the survey stated that they would spend $0-249 per year on ROM tools/management systems, but due to the relatively large monetary range, it is difficult to determine if therapists selected this response because they would not spend any money ($0) or if they would consider investing in a ROM tool/management system if it cost less than $250. Clearly, this is another item that lacked precision when hoping to examine this particular variable.

However, when considering the qualitative data that indicated therapists lack the time to implement an outcome measure, perceive no benefit, have no agency requirement, and do not believe they could locate an appropriate outcome tool, it seems as if most therapists would probably not be willing to spend any money on ROM tools/management systems. This is noteworthy based on previous findings that suggest soliciting patient feedback and monitoring outcome not only improves patient care but is also cost effective. One example of the cost effectiveness of ROM was demonstrated through Center for Family Services (CFS) located in Palm Beach, Florida (Bohanske & Franczak, 2010). Much like many other clinics struggling to balance limited resources with a high demand for services, CFS

decided to implement the Partners for Change Outcome Management System (PCOMS, discussed in the preceding section) in hopes of addressing many of their clinical concerns (Bohanske & Franczak, 2010). Their decision to implement PCOMS, one example of a ROM management system, literally paid off. They reported results that stated, "average length of stay decreased more than 40%. Cancellation and no-show rates dropped by 40% and 25%, respectively. Most impressive of all, the percentage of clients in long-term treatment that experienced little or no measured improvement fell by 80%! In 1 year, CFS saved nearly $500,000, funds that were used to hire additional staff and provide more services" (Bohanske & Franczak, 2010, p. 308). These findings seem to suggest that investing in ROM tools/management systems is worth the financial investment and improves cost effectiveness of clinical services. Interestingly however, results of the present study suggest that most therapists are unwilling to make a financial commitment to the use of ROM tools/management systems.

Consequently, both the quantitative and qualitative information provided by the therapists within the present study suggests the lack of routine outcome monitoring is associated with "practical and philosophical" concerns, versus basic therapist demographic characteristics, level of credential, rurality, and other practice function variables (Hatfield & Ogles, 2004). Indeed, Hatfield and Ogles (2004) defined "practical" concerns as variables such as time and cost, whereas "philosophical" concerns pertained to relevance and appropriateness of ROM in clinical practice. Thus, not only do the "practical and philosophical" concerns presented by Hatfield and Ogles (2004) match the concerns derived from the

therapists in the present study, it also appears as if the primary reasons surrounding the lack of outcome measures has remained the same for approximately a decade. Together, these findings begin to narrow in on some of the more important reasons why the prevalence rate of ROM use has not increased since 2004 (Hatifield & Ogles, 2004).

In closing this section, based on the results of the present study therapists who chose to use ROM tools/management systems as part of their day to day practice of psychotherapy are more likely 1) To have been and/or are currently being required to use ROM tools/management systems; and 2) Work in an institutionalized setting. Based on the qualitative data, therapists who are subject to some form of agency policy that requires the use of ROM tools/management systems might also be more likely to use outcome measures.

6.6 ROM Users vs. Non-users with Clinical Supervision: General Comparisons

Hypotheses 2b and 2c explored how demographic variables and training background might influence a therapist's decision to discuss ROM results with their supervisor. In regards to therapist demographics it was hypothesized that none of the examined variables would produce significant relationships in regards to the use or non-use of ROM tools/management systems. Data analyses failed to reject the null hypothesis. None of the demographic variables, which included age, ethnicity, gender, primary language, and/or theoretical orientation, produced statistically significant relationships when exploring why therapists might chose to discuss ROM results during the process of clinical supervision. Likewise, none of the therapist

training background variables, which asked about level of credential and whether or not a participant was required to use ROM tools/management systems during and/or after their clinical training, produced statistically significant relationships regarding whether or not a therapist would discuss ROM feedback results during supervision. Thus, these results suggest that the decision to discuss outcome monitoring results is perhaps the result of variables unrelated to that of the basic demographics and training background variables explored within this study.

While therapist demographics and training background seemed to have no significant impact on a therapist's decision to discuss ROM results with their supervisor, results were mixed when examining a therapist's current practice setting and function characteristics (Hypothesis 2d). Regarding the variables of practice location (urban vs. rural), the number of therapists providing services at a location, approximate total caseload, the number of patients seen in one day, type of clinical setting, and the approximate number of years practicing produced no statistically significant relationships as it pertains to a therapist's decision to discuss ROM results during supervision. Much like that of the comparison between ROM users and non-users within the overall sample, only two of the observed variables resulted in statistically significant findings at the $p < .002$ level. Those findings will be discussed in later sections comparing ROM users versus non-users when considering the process of clinical supervision.

6.7 ROM Users vs. Non-users with Clinical Supervision: Self-reflection and Insight

Hypothesis 4 proposed that therapists who discuss ROM results within the process of clinical supervision will display higher levels of self-reflection and insight. However, results of the SRIS suggested that there are no significance differences between the therapists who choose to discuss their ROM results during supervision and those who do not.

Recall that the Need for Self-reflection domain of the SRIS produced a significant finding in regards to the use versus non-use of ROM within the entire sample. However, each of the domain scores was essentially all elevated when considering the domain maximum value scores (Table 25). This appears to be similar for the therapists who choose to discuss their ROM results during the process of supervision and is perhaps worthy of further examination (Table 26).

Intuitively, these results seem to make sense due the fact that most therapists would probably hold favorable attitudes toward the development of a more comprehensive understanding of their thoughts, feelings, and behaviors. Indeed, ROM results are specifically designed to provide additional information, or insight, to inform ongoing courses of psychotherapy. This is perhaps why ROM users choose to monitor their outcome and report a statistically significant higher level of self-reflection than ROM non-users. It is possible that they believe it provides additional opportunities for introspection and evaluation of their clinical work.

Additionally, a more comprehensive understanding of how self-reflection and insight impact the process of psychotherapy is what makes clinical supervision

a major component of clinical training. As such, it perhaps can be reasonably assumed that as therapists have access to ROM results, and are provided with an opportunity to make sense of those findings during clinical supervision, they will probably perceive an increased level of personal self-reflection and insight. However, the present study cannot determine whether or not it is the use of ROM tools/management systems, the process of clinical supervision alone, some other unmeasured variable, and/or a combination of these variables that is accounting for such a high level of perceived self-reflection and insight amongst therapists.

Importantly, when considering the results derived from the SRIS, it must be emphasized that the scale measures *perceived* levels of self-reflection and insight. In other words, it captures a respondent's overall attitude toward the constructs, or idea of, self-reflection and personal insight, versus whether or not self-reflection and insight were increased due to a specific type of behavior or intervention. Thus, a more direct evaluation of the construct is needed above and beyond what the SRIS was able to provide. For example, the current study sought to explore if levels of self-reflection and insight were associated with the use of ROM tools/management systems and the subsequent decision to discuss ROM results during supervision. However, the SRIS is perhaps best used to assess how a therapist perceives his or her own levels of self-reflection and insight, and has limited utility in regards to being able to accurately examine self-reflection and insight specifically in regards to the use of ROM tools/management systems or a discussion of ROM results during the process of supervision. In short, *perceived* levels of self-reflection and insight

are much different than using a specific tool (i.e. ROM tool), or specific practice (i.e., discussing ROM results in supervision) as a means of reflective practice.

These results are similar to that of earlier findings where researchers discovered that the SRIS was unable to detect differences in personal insight for nurses engaged in reflective practices of continuing education (Asselin & Fain, 2013). Their results suggest that the SRIS is perhaps better utilized to assess changes in thinking or attitudes toward self-reflection and insight, which is theoretically needed for individuals to begin reflecting on specific practice situations (Asselin & Fain, 2013). Therefore, they suggest that future studies explore using the SRIS in conjunction with specific practice measures to further examine self-reflection and insight (Asselin & Fain, 2013). These findings seem to hold true for the present study as well. That is, the SRIS adequately measured perceived levels of (attitudes toward) self-reflection and insight, but it cannot determine if therapists believe self-reflection and insight are associated with the specific use of routine outcome monitoring. Consequently, the SRIS demonstrated that most therapists are highly reflective and insightful individuals, who supposedly would be open to implementing tools and strategies to increase levels of self-reflection and personal insight (i.e., ROM tools and management systems). Thus, future studies could utilize a pre/post design to examine whether or not perceived levels of self-reflection and insight are related to the use of ROM tools/management systems.

While the results of the SRIS suggested that, in general, therapists perceive value in self-reflection and insight, questions arise when hoping to uncover *how*

therapists actually go about engaging in those processes. For example, perhaps a therapist's choice to utilize ROM tools/management systems is just one method amongst many of engaging in self-reflection and developing personal insight. Indeed, results from the present study might suggest that therapists are engaging in a variety of methods to monitor outcome, which could then be interpreted as reflective practice and insight building. The use of symptom inventories, therapist created self-report measures, and verbal patient feedback could all be considered as engaging in self-reflection and developing personal insight about a course treatment. Moreover, the use of clinical supervision and/or consultation, both of which were revealed through the qualitative data, are also possible methods of engaging in reflection and increasing personal awareness. Therefore, while the SRIS has revealed high levels of perceived self-reflection and insight within the current sample, questions still remain about what therapists are actually doing when they report being reflective and committed to developing personal insight.

In short, when returning to the focus of the current study, it appears that not all therapists believe that formal routine outcome monitoring is essential to the process of self-reflection and insight. As such, future studies should examine more closely how therapists operationalize self-reflection and how they perceive themselves to be engaged in the process of self-reflection. Finally, when considering results derived from the SRIS it should also be noted that the measure itself is relatively face valid and is therefore easily susceptible to social desirability bias (Singleton & Trait, 2010; Krosnick, 1999). That is, while therapists were asked to be honest, they might still have felt pressured to respond in a certain manner. While

this does not invalidate the results, it does point toward another limitation of the current study.

6.8 ROM Users vs. Non-users with Clinical Supervision: Sample Prevalence Rate

Hypothesis 2a speculated that within the group of therapists that did endorse ROM use, most would not discuss the results during supervision. Results failed to reject the null hypothesis. Only 70 therapists, or 19.3% of the entire sample, indicated that they discuss ROM feedback with their supervisor. Thus, while some therapists are in fact monitoring their outcome, the results are not further discussed within the context of clinical supervision. The current study did not require therapists to identify whether they were a student/unlicensed therapist or a fully licensed practitioner. Thus, it remains unclear if the 70 participants who indicated that they discuss their outcome results with their supervisor are predominantly trainees/unlicensed and therefore are required to receive supervision, or if they are licensed individuals who are choosing to remain engaged in clinical supervision.

Regardless of licensure status, however, this finding remains worrisome based on previously reported results that even experienced therapists are unable to identify patients at risk for deterioration (Lambert, 2010). Furthermore, when set against the fact that most supervisors rely on the subjective account of their supervisee to provide information regarding treatment progress, it appears that ROM use within the process of clinical supervision is tragically underutilized (O'Donovan, Halford & Walters, 2011).

6.9 Reasons Therapists Discuss ROM Results with Supervisors

The total number of supervision hours received each week produced a statistically significant relationship in regards to a therapist's decision to discuss ROM results with their supervisor. Therapists who are not discussing their outcome results during supervision reported, on average, receiving 0.41 hours of supervision each week, while therapists who do discuss their ROM results during supervision, on average, receive 1.85 hours of supervision each week. Thus, the more supervision received each week, the more likely a therapist is to discuss their outcome results during that process.

It can probably be reasonably assumed that the therapists engaged in supervision are probably being required to receive supervision and, by extension, are also being required to monitor their outcome and discuss the results with their supervisor. Follow up analyses comparing the required amount of supervision hours for therapists working in private practice versus institutionalized settings provide additional evidence as to what might be associated with ROM use. These results suggested that therapists working in institutionalized settings, on average, are required to attend more supervision hours each week than their colleagues who work in private practice settings. Thus, it appears that private practice versus institutionalized settings might have different resources available in regards to training, supervision, and routine outcome monitoring. Indeed, although non-significant in regards to ROM use within clinical supervision, the sites that represented the highest rates of ROM discussions during supervision tended to be institutionalized settings that receive and/or are reliant on some form of outside

funding, thus harkening back to the Hatfield and Ogles (2007) finding that "business related reasons," funding or money could potentially be a moderating variable.

Consequently, this might suggest that the relationship between a therapist's decision to discuss ROM feedback results is stronger within the clinical settings that receive external sources of funding meant to assist in the daily operation of the agency/center/clinic. While this particular research question is outside the scope of the present study, it makes rational sense when considering the type and amount of resources a site must have available to provide ongoing supervision, training, and ROM tools/management systems. Although speculation, Hatfield and Ogles (2004) suggested a similar rational: "It is probable that these more institutional work settings have more resources for conducting outcome assessments. It is also possible that most of the clinicians who work in institutional work settings receive much of their income from Medicaid/Medicare, grants, or other governmental sources." (p. 490). Thus, it appears that certain clinical settings simply have access to more resources, which makes it more likely for therapists to be engaged in supervision, and to therefore discuss ROM results with their supervisor. Moreover, this highlights earlier reported results that training requirements significantly impact a therapist's decision to use or not use ROM tools/management systems. Simply put, if a clinical setting has enough resources to provide ongoing training, education, and supervision, then it increases the likelihood that supervisors are requiring their supervisees to track their outcome and the overall use of ROM tools/management systems at that particular site.

Relatedly, the amount of money therapists chose to spend on ROM tools/management systems resulted in a statistically significant relationship in regards to discussing ROM results during clinical supervision. Results suggest that the more money (> $249) therapists invest in ROM tools/management systems the more likely they are to utilize them as part of their supervision discussions. Similar to ROM use in general, directionality cannot be determined in regards to this particular variable and since the reasons are essentially the same they are not repeated in this section. However, what will be reiterated is that money seems to be associated with a therapist's decision to use outcome measures and discuss the results during supervision, and it may be stem from the fact that ROM use maintains and/or increases income/funding.

Finally, qualitative results provide additional information as to why therapists might choose to discuss their ROM results with supervisors during the process of clinical supervision. Results suggested that therapists shared their ROM results with their supervisors in hopes of exploring overall treatment progress and whether or not treatment needs to be adjusted to ensure a positive outcome. Indeed, the qualitative results derived from this variable suggest that this group of therapists value the feedback of their supervisor as it specifically relates to ROM results. These findings are rather hopeful when combined with earlier reported results from the study conducted by Reese and colleagues (2009) who discovered that the supervisees who shared their ROM results with their supervisors produced significantly better outcome. Thus, it appears as if there is at least a sub-group of therapists who are actively choosing to utilize ROM tools/management systems, are

discussing the results during clinical supervision, and realize their subjective assessments of treatment progress is simply not enough to ensure positive outcome.

In closing, based on the results of the present study, therapists who chose to use ROM tools/management systems and discuss the results during clinical supervision are more likely to: 1) Be required to engage in approximately 2 hours of supervision each week, and 2) Are willing to spend $250 or more on ROM tools/management systems each year.

6.10 Reasons Therapists Do Not Discuss ROM Results with Supervisors

There were a variety of reasons identified by therapists as to why they do not discuss ROM results with their clinical supervisor. Therapists who reported not discussing their outcome results during supervision reported, on average, practicing for approximately 10.48 years, while therapists who do discuss their ROM results during supervision, on average, have been practicing for approximately 7.29 years. While these differences are not statistically significant, they are being included for the sake of discussion. One explanation for these findings could be that fewer years practicing are associated with trainee/unlicensed status and therefore engagement in clinical supervision. In addition, it could also mean that therapists earlier on in their careers are more closely identified with their training experiences, which would have been more likely to include outcome monitoring. In other words, newer therapists might still be influenced by their training requirements to use ROM tools/management systems and subsequently discuss the results with their supervisors. Conversely, the longer a therapist has been practicing, the less likely

they are to discuss ROM results with their supervisor. This would make sense when considering the fact that the longer a therapist practices, more perceived skill, expertise, and competency has been developed. In turn, this would make it less likely that these therapists are engaged in clinical supervision, and even if they are, remain less likely to specifically focus on ROM results as part of that process.

The qualitative results also seem to support these general conclusions. They suggest that most therapists within the current sample are not actively engaged in clinical supervision because they are fully licensed therapists, and by default, are not discussing their outcome results with a supervisor. Additionally, some therapists do not see a need to discuss their outcome results with their supervisor. They stated that they have other issues related to their clinical practice that required time during supervision. Simply put, however, it appears that once therapists become licensed they are no longer required to engage in formal clinical supervision, which is why they are not discussing their outcome results during the process of clinical supervision.

6.11 ROM Use vs. Non-use and ROM Use with Clinical Supervision: Summary

At this point, it is probably obvious that the preceding sections did not include results pertaining to the use of formal/informal symptom inventories and/or informal methods of monitoring patient outcome. However, they will now be addressed as part of the overall summary designed to integrate the findings listed within the preceding discussion section. Recall that most therapists included in the study are not using ROM tools/management systems. Closer examination of

those findings reveal that some therapists are choosing not to use ROM tools/management systems because they have instead implemented symptom inventories within their practices. Other therapists are not using ROM tools/management systems because they are simply relying on verbal reports and patient feedback in order to informally monitor their outcome. However, it should be highlighted that even within the sample of therapists who confirmed the use of ROM tools/management systems, some of them are actually using formal/informal symptom inventories. In other words, the overall ROM use within the sample, and the associated results discussed during supervision, might not be linked with actual formal routine outcome measures. The use of a variety of different methods to track outcome was also observed by Hatfield and Ogles in their article published in 2004.

One interpretation of these findings is that most therapists do not understand the differences between an outcome measure and a symptom inventory. Moreover, they perhaps do not understand the difference between a formal outcome measure/symptom inventory and an informal measure/inventory. Most importantly however, it appears as if most therapists simply do not care. That is, most therapists are not tracking their outcome anyway and therefore do not seem motivated to determine the why, what, and how of routine outcome monitoring. Indeed, when exploring the variables that seem to be related to ROM use, it appears as if being required to use outcome measures at some point during and/or after their clinical training and working in an institutionalized setting are the most important. Additionally, when looking at the variables associated with ROM use and supervision discussions, it appears that being required to attend at least 2 hours of

supervision each week are significant and a willingness to spend $250 or more on ROM tools/management systems are significant variables. Taken together, these results seem to suggest that the period of time pre-licensure is critical in regards to ROM use and therapists within institutionalized settings are more likely to feature ROM use within their staff. This might be why being required to engage in clinical supervision may be more likely to happen in institutionalized settings and those types of settings might have more access to resources to purchase ROM tools/management systems. Qualitative results also seem to suggest that perhaps institutionalized settings have developed certain policies that direct clinical service and training activities. In other words, agency policies answer many of the why, what, and how questions therapists might have regarding ROM tools/management systems.

In summary, while not specifically examined during the present study, external requirements appear to be the main driver behind a therapist's decision to engage in routine outcome monitoring. Indeed, the results present a crossroads in regards to interpretation. The first road would suggest therapists who routinely monitor their outcome (formally or informally) are genuinely interested in providing optimal patient care, the other (more likely) road might suggest that therapists who are monitoring their outcome are only doing so because their agency/training program/supervisor requires it. Moreover, it can probably be reasonably assumed that ROM use is being required to maintain funding and/or obtain data for quality assurance purposes. While the second option certainly appears to be more cynical, it seems to align with the findings that indicate most

therapists, 60% of the current sample, are not monitoring their outcome at all. Thus, despite the overwhelming literature base that has repeatedly demonstrated feedback on patient progress prevents treatment failures and therapists cannot accurately judge patient progress in treatment, therapists are still not utilizing ROM tools/management systems unless specifically required to do so.

6.12 ROM Users vs. Non-users: Self-Assessment Bias

The fifth and final set of hypotheses centered on exploring self-assessment bias, or the tendency to perceive one's skills, expertise, and knowledge as superior to others (Dunning, Heath & Suls, 2004). Recruited therapists were asked to evaluate their performance compared to their colleagues with similar credentials and estimate the percentage of their patients who improve, remain the same, or become worse during a course of treatment. These questions were taken from a previously published study in hopes of continuing the exploration of therapist self-assessment bias (Walfish, McCalister, O'Donnell & Lambert, 2012).

Based on the data set, the majority of therapists believe their skills, knowledge, and expertise to be above average when compared to their peers with similar credentials. The data set mean was at the 68th percentile and the mode was at the 75th percentile. Thus, on average, therapists within the current study believe themselves to be performing better than 68% of other therapists with similar credentials. The modal response might reflect an even higher level of bias, as it suggests that the surveyed therapists believe their skills, expertise, and knowledge are superior to 75% of therapists with similar credentials. Only 4 therapists within the entire sample rated themselves below the 50th percentile (range=25%-47%). In

terms of sample size, 183 therapists or 58% of the total sample believe they are in the 70th percentile in regards to their skills, knowledge, and expertise.

The trend of self-assessment bias continues when examining rates of perceived improvement. Therapists, on average, reported that 68% of their patients improved with a mode at 60%. 56% of the therapists who responded to the survey believed that 75% or more of their patients improved while engaged in psychotherapy with them. In other words, over half of the therapists who participated in the current study, believe that 75% of their patients are improving, which included one therapist who reported that 100% of patients improved due to a course of treatment.

Regarding patient non-responders, therapists within the present sample reported that, on average, 25% of their patients remained the same, with the mode being even lower at 20%. In part, this seems to match other findings from the current study that suggest therapists believe 75% of their patients are getting better. Indeed, 91% of the therapists who completed the survey reported that less than 50% of their patients showed no change while in treatment.

Finally, when considering patient deterioration rates, therapists who participated in the present study reported that, on average, 7% of their patients became worse while in therapy. The modal response was lower at 5%. The vast majority of the sample, 86%, believed that 10% or less of their patient's deteriorated while engaged in psychotherapy.

In summary, when examining the results of self-assessment bias present within the current sample, results would suggest that 1) Therapists believe

themselves to be above average clinicians (*M*=68.48), 2) Rate themselves favorably when considering improvement (*M*=67.63), 3) underreport patient non-response rates (*M*=24.95), and 4) estimate patient deterioration (M=*7*.29) rates that are relatively consistent, although lower, with previous research findings (Hannan et al., 2005; Hatfield et al., 2010). Regarding the first point, when the results are evaluated from a statistical perspective, therapist self-assessment of their own performance challenge generally assumed statistical probabilities. That is, statistically speaking 58% of the sample cannot fall within the 70th percentile! Therefore, the results would strongly suggest that therapists are not immune to self-assessment bias and replicates findings from many previously published studies (Meyer, 1980; Dunning et al, 2004; Walfish et al., 2012). While the results are not as heavily skewed as in the article published by Walfish and colleagues, they still suggest that therapists are subject to overly positive evaluations of their clinical skills performance.

The presence of self-assessment bias is perhaps further revealed through a perception that, on average, almost 70% of patients improve while in treatment. Although not impossible, previous published studies estimate 50%-60% improvement rates (Hansen et al., 2002). It should be noted, that these estimated rates were derived from studies that met criteria to be labeled as "randomly controlled trials" (Hansen et al., 2002). Therefore, when considering naturalistic settings (which is probably more reflective of the settings within this sample), a 70% improvement rate seems to suggest self-assessment bias. However, it might also be a method of contending with the burden of providing psychotherapy

amongst the complexities of diagnoses, heavy caseloads, and ongoing social, political, and economic concerns (Walfish, McCalister, O'Donnell & Lambert, 2012).

Notable, however, are the reported rates for non-response and deterioration. Averages of approximately 25% and 7% respectively, fall within the estimated rates found within the literature. Again, Hansen and colleagues (2002) discovered that approximately 35%-40% of patients failed to respond to empirically supported treatments within an RCT and that 5%-10% of patients worsened while in therapy. While percentages for a naturalistic setting are probably higher, the results from the current sample seem to fall within the expected ranges for patient non-responders and deterioration. This is a promising finding considering the Walfish et al. study (2012) discovered that the therapists within their sample estimated a 3.66% deterioration rate. While the Walfish et al. 2012 findings are probably an example of underestimating patient deterioration, when combined with findings from the current study it might suggest a decrease in self-assessment bias as it pertains to estimated rates of patient deterioration. However, it might also suggest knowledge of existing research and/or social desirability bias (Singleton & Straits, 2010; Krosnick, 1999). Social desirability bias might be especially relevant as a statement that said, "The remaining questions explore self-assessment bias, or the tendency to perceive one's skills, expertise, and knowledge as superior to others," preceded the survey questions for this section. At least one therapist indicated that he was attempting to adjust his percentages to "account for the self assessment bias," which might suggest that the therapists within the sample might

have answered these questions differently if they were not informed as to what was being examined.

Whatever the reason, the fact that the rate of perceived deterioration has increased hopefully reflects a more realistic evaluation of psychotherapy outcome. This is important because the recognition and acknowledgment of patient deterioration is what originally prompted therapists and researchers to begin soliciting patient feedback. However, the results remain curious when set against the finding that therapists within the sample also believe themselves to be more skilled and competent than approximately 70% of their colleagues. In other words, it appears that the vast majority of therapists overstate their abilities, but when it comes to estimating rates of non-response and deterioration, they are able to provide more realistic estimates. Consequently, one would perhaps expect a lower overall average estimate of ability when considering the reported average deterioration rate. Put another way, do therapists who believe they are, on average, in the 70th percentile actually believe their deterioration rates to average around 7%? Perhaps more importantly, on what data do these therapists base these particular estimates? For example, one participant reported that only 2.5% of her patients improve while in psychotherapy, but also rated herself in the 75th percentile regarding her clinical skills. Additionally, she reported that 95% of her patients remain the same and 2.5% deteriorate. However, the one participant who reported that 50% of his patients deteriorate, also reported that 50% of his patients get better and that 50% of his patients show no change. Again, a logical follow up question to these therapist self-assessments would be to inquire how it is they go

about arriving at these particular percentages? Especially, when based on findings from the present study, which have been reported earlier, it appears that most therapists are not utilizing ROM tools/management systems. In turn, this seems to suggest that therapists, such as those described above, are relying on their own clinical judgment when making estimates of their performance.

While the results exploring self-assessment bias within the current sample appear to be mixed, they still suggest that therapists are susceptible to over estimating their skills, expertise, and knowledge when compared to their colleagues. This suggests that self-assessment bias remains embedded in the practice of psychotherapy and the overall performance of psychotherapists. These results are troubling when considering the published findings of Ehrlinger and Dunning (2003), who discovered that incorrect self-assessment leads to negative performance outcome. Moreover, Ehrlinger and colleagues (2008) published findings that poor performers are largely unaware that they are not as competent as their peers and they erroneously believe their achievements are equal to that of their peers, when in actuality they fall within the bottom portion of a distribution.

This is particularly interesting when considering the previously discussed results regarding self-reflection and insight within the current sample. That is, if the therapists who participated in the study are as reflective and insightful as the SRIS results suggest, then one could reasonably assume that an evenly distributed statistical percentage of below, average, and above average performers should be observed. Interestingly however, this was not case when examining the results of the current data set. Instead, while therapists value self-reflection and insight, and

perceive themselves to be highly engaged in reflective and insight building practices, results seem to indicate that they actually lack the necessary insight to realize their own levels of self-assessment bias. In turn, this could lead to faulty decisions regarding skills, expertise, level of knowledge, and their ability to correctly evaluate their patient outcome. Even more alarming, research suggests that the least competent therapists tend to be the most at risk for self-assessment bias (Ehrlinger, Johnson, Banner, Dunning & Kruger, 2008).

Therefore, when considering that self-assessment bias exists and that therapists probably lack an accurate awareness of the overall amount of impact it inflicts upon their clinical work, it is perhaps not surprising that the majority of therapists within the current sample denied using ROM tools/management systems. It appears that their self-assessment bias, that may or may not be accompanied by a lack of awareness about their actual performance, has inoculated them against choosing to utilize ROM tools/management systems. This is especially concerning due to the overwhelming evidence that outcome measures can predict patient deterioration and that providing this information to therapists can reduce deterioration rates. Yet, despite all of these published findings, therapists are still not implementing routine outcome monitoring into their daily psychotherapy practice. Dunning et al., 2004 stated that, "people are often motivated to reach flattering conclusions about themselves and their place in the world. Thus, they mold, manage, and massage the feedback the world provides them so they can construe themselves as lovable and capable people" (p. 78). Unfortunately, as therapists engage in sophisticated cognitive maneuvers in order to make themselves

feel better about their "place in the world," they remain completely unaware that a certain percentage of their patients are getting worse and that it might actually be the therapist's fault.

6.13 Brief Summary of Findings

Due to the exploratory nature of the study a relatively large number of variables were examined which resulted in mixed results. For ease of reference, the statistically significant results from the planned analyses and the most salient qualitative responses are provided in list form.

1. The majority of therapists due not utilize formal routine outcome monitoring tools/management systems. 60% of the current sample denied the use of ROM tools/management systems, while approximately 39% endorsed the use of outcome measures.

2. There is a statistically significant difference in regards to the perceived "Need for Self-Reflection" between ROM users and non-users. That is, ROM users, on average, display higher levels of motivation toward developing self-reflection versus non-users.

3. Therapists are more likely to use ROM tools/management systems if they:
    i. Have been or are currently being required to use ROM tools/management systems as part of their clinical training,
    ii. Work in an institutionalized setting,
    iii. Are subject to some form of agency policy that requires the use of ROM tools/management systems (Qualitative Data).

4. The majority of therapists do not discus outcome monitoring results with their supervisor. Only 19.3% of the current sample indicated their ROM results were discussed during the process of clinical supervision. It should be noted, that most fully licensed therapists are not engaged in clinical supervision.

5. Therapists are more likely to discuss their ROM results during clinical supervision if they:

i. Are required to engage in approximately 2 hours of supervision each week,
ii. Are willing to spend $250 or more on ROM tools/management systems each year.

6. Results were mixed when examining therapist self-assessment bias:
   i. Therapists rate themselves as above average clinicians (*M*=68.48) or 70th percentile. From a statistical perspective, this defies generally assumed statistical probabilities.
   ii. Therapists rate themselves favorably when considering improvement (*M*=67.63), or 67% of their patients improve as result of a course of treatment with them.
   iii. Estimate non-response (*M*=24.95) and deterioration (M=*7*.29) rates that are relatively consistent with previous research findings. Approximately 25% of patients show no change due to therapy, and 7% of patients get worse while in therapy.

Chapter 7 Clinical and Research Implications

7.1 Research Implications

Based on the findings of the present study a number of implications regarding the intersection of routine outcome monitoring and psychotherapy outcome research have emerged. However, as with most research findings, they must be understood within the historical context that has influenced the progression and development of psychotherapy outcome research. Specifically, the "research history" as it pertains to psychotherapy outcome has repeatedly demonstrated that patients do not always improve while engaged in treatment and therapists are often unaware of this lack of improvement (Bergin, 1971).

Toward that end, the literature review provided at the beginning of this document is a reminder that results from early efficacy and effectiveness studies suggest that psychotherapy should and can be utilized in the treatment of psychiatric conditions (Wells, 1999; Lambert & Ogles, 2004). Moreover, the debate between randomly controlled clinical trials and "pragmatic trials" have paved the way for outcome researchers to refine the focus of psychotherapy outcome studies (Gartlehner, Hansen, Nissman, Lohr & Carey, 2006; Howard, Moras, Brill, Martinovich & Lutz, 1996). Indeed, this lead to the patient-focused research movement that began to explore questions centering on whether or not a particular treatment was working for a particular patient (Lambert et al., 2001). This was followed by evidenced-based practices in psychology and the creation of an APA Task Force designed to provide specific guidelines to the field of practicing

psychologists and the integration of research, clinical expertise, and patient characteristics (APA, 2006). Embedded within these recommendations was a focus on monitoring patient outcome. This was followed by the development of practice-based evidence that sought to extend evidence-based practices and suggested that the provision of psychotherapy services should be combined with a bona fide measurement system within routine practice (Castonguay et al., 2013). As a result, the field of psychotherapy outcome research has spanned approximately 30 years and informed the research questions of the present study.

While there is clearly a well-designed and purposeful lineage associated with psychotherapy outcome, results from the current study reveal troubling findings. To borrow from the practice of psychotherapy itself, the findings could be "diagnosed" as suffering from "major depression." Considering that only about 40% of the therapists who participated in the current study are engaged in outcome monitoring, it appears as if psychotherapy outcome research findings are continuing to suffer from a lack of influence upon the individuals and field which it examines. In other words, the cumulative results of psychotherapy outcome research, regardless of the methodological paradigm, does not seem to have made much of a difference regarding ROM use with therapists in routine practice. Put another way, 30 years of research evidence is currently being ignored and/or misunderstood by approximately 60% of therapists who chose to participate in the current study. Indeed, it appears that most therapists are not actively soliciting feedback from their patients and the relatively unchanged prevalence rate of ROM use reported from 2004 until today suggests that research is perhaps not an effective method of

convincing therapists to begin using ROM tools/management systems (Hatfield & Ogles, 2004).

Sigmund Freud, perhaps one of the "original" psychotherapy outcome researchers, utilized the term "repetition compulsion" to describe the compulsion of neurotic patients to repeat and re-enact past dynamics originating early in childhood (Rychlak, 1981). Arguably a stretch, but perhaps the field of psychotherapy outcome research is caught within its own version of "repetition compulsion" in which researchers, anxiously engaged in the repetitive process of "publish or perish", are having minimal impact on those who are actually providing psychotherapy.

For a moment consider the relative amount of time and effort dedicated to the research field of psychotherapy outcome. A Google Scholar search utilizing the term "psychotherapy outcome studies" produced 110,000 different articles in approximately 0.05 seconds (Google Scholar, 2017). Acknowledging the limitations associated with Internet based search engines, it can still be reasonably argued that there already exists a wealth of literature dedicated to preventing patient deterioration and patient non-responders. Are we to assume that continuing to publish findings regarding ROM use will eventually result in therapists choosing to monitor patient outcome? If so, how long might that take? And in the meantime, how many patients will suffer from negative treatment outcome? Practical wisdom suggests that publishing alone might not be enough. Thus, how does a research field associated with such consistent and robust findings reconcile 30 years of results with a 40% ROM use rate within the current sample? Many researches might

conclude that 40% is better than nothing, but what about the patients who are engaged in treatment with the other 60%? How is research helping those patients or, from another perspective, how is research informing the practices of those therapists? Boswell, Kraus, Miller and Lambert (2015) seemed to acknowledge this current state regarding psychotherapy outcome research. In their article, they explicitly call for more basic research surrounding the "adoption, implementation, and sustained use of outcome monitoring and feedback systems, as this information may enhance future adoption and compliance and, therefore, further improve outcomes" (p. 16). While Boswell and colleagues (2015) seem to recognize psychotherapy outcome research must prioritize the barriers to ROM use, the question still remains: will more research be enough?

Obviously, the field of psychotherapy outcome research is subject to the same imperfections, limitations, and challenges as other areas of research. However, when reminded that outcome measures were originally developed to identify patient non-responders, perhaps it is time for the field to apply that same mindset toward identifying "therapist non-responders." Therapists simply are not responding to literally decades of research findings. As such, the field dedicated to psychotherapy outcome must decide how to identify the barriers to the use of ROM tools/management systems *and* how to reduce those barriers on behalf of therapists and patients alike. This might start with acknowledging that simply continuing to publish research findings, while compelling and statistically sound, might not actually be enough to stimulate meaningful change amongst therapists in routine

practice. Failure to do so suggests a bleak outlook regarding overall patient care and the future of psychotherapy services.

7.2 Clinical Implications

While researchers must begin to honestly grapple with the impact of their findings, it must not be understated that research has still informed ongoing clinical practice. For instance, routine outcome monitoring would not have been demonstrated to be such an effective intervention regarding patient deterioration and non-response without the commitment from individuals such as the Lambert research group. Additionally, the persistence of psychotherapy outcome researchers has continued the ongoing dialogue surrounding ROM use and the role it plays in psychotherapy. Moreover, psychotherapy outcome researchers have produced important findings that seem to reinforce the fact that a 40% ROM use rate within the current sample is cause for alarm.

For example, in 2016 Goldberg and colleagues published a groundbreaking article in regards to psychotherapy outcome. Their article, which examined therapist experience and patient outcome, produced sobering findings for those involved in the provision of psychotherapy services (Goldberg et al., 2016). Simply put, their study sought to answer whether or not therapists get better (produce better patient outcome) the longer the time spent in practice. Their sample included over 6,500 patients and 170 therapists who ranged from 0.44 years to 17.93 years in clinical practice (Goldberg et al., 2016). Results suggested that, on average, therapists *did not produce better patient outcome the longer they practiced*

(Goldberg et al., 2016). In fact, the study authors stated that, "the present analyses show that, in the aggregate, therapists did not improve with more experience, operationalized as either time or number of cases" (Goldberg et al., 2016, p. 7). That is, length of time practicing and/or the overall number of patients seen by therapists does not automatically mean they will actually become better therapists capable of producing better patient outcome!

The follow up analysis from the present study examining years in practice and therapists' use/non-use of ROM tools/management systems and their clinical work setting revealed an interesting perspective when set against the Goldberg et al., 2016 study. The results suggested that regardless if therapists choose to work in either a private practice or an institutionalized setting, ROM use was associated with a significantly higher average length of practice. Even more specific, the majority of therapists in institutionalized settings reported ROM use and have been in practice approximately twice as long as their colleagues in a similar setting who denied the use of ROM tools/management systems. This lends even more support to earlier discussed findings that therapists in institutionalized findings are more likely to track their patient outcome. Based on this particular follow up analysis, results suggest that the longer in practice, the greater likelihood to use ROM tools/management systems.

On the surface this would appear to be an encouraging finding, especially when considering Goldberg and colleagues (2016) are asserting that therapists become worse over time. When combined with findings from the present study, results would suggest that although therapists are not improving the longer they

practice, there might be a trend of therapists choosing to monitor their outcome the longer they remain in practice. Which in turn, might then counteract negative patient outcome. This would perhaps be a fruitful area of future research.

However, this encouraging finding is tempered when examining the total amount of therapists choosing to use/not-use ROM tools/management systems. Specifically, while the therapists in both the private practice and institutionalized settings who report ROM use have more experience than their colleagues, they unfortunately represent the minority of the sample. That is, 180 therapists (Private Practice and Institutionalized Settings) denied the use of ROM tools/management systems, whereas 110 endorsed the use of ROM tools/management systems. In other words, even though therapists who have been in practice longer are in fact choosing to utilize ROM tools/management systems, they still only represent about 40% of the overall ROM use between both types of clinical settings. This is yet another finding suggesting that the majority of therapists are not utilizing ROM tools/management systems in their daily practices of psychotherapy

These results are perhaps even more a cause for concern when combined with the previously mentioned results that suggest clinical supervision does not improve patient outcome (Rousmaniere, Swift, Babins-Wagner, Whipple & Berzins, 2014). That study produced findings that indicated supervisors accounted for approximately .04% of the variance associated with patient outcome. Thus, we now have a situation where, at least empirically, therapists seem to be getting worse and supervisors are unable to influence patient outcome. Based on these findings, it seems that the implementation of ROM tools/management systems must be

incorporated into the daily practices of therapists immediately in hopes of preventing patient deterioration. Sadly however, only 40% of practicing therapists are endorsing the use of ROM tools/management systems.

A 40% prevalence rate of ROM use is troubling when considering the overall impact routine outcome monitoring can have on psychotherapy. For instance, Whipple and Lambert (2011) reported meta-analytic findings that utilized the OQ Analyst system to monitor patient progress. The meta-analysis produced an effect size of $g = 0.53$ for the therapists who received outcome feedback, and $g = 0.55$ when both the therapist and the patient received feedback. These effect sizes are of note when comparing them to published findings that suggest effect sizes examining active treatments usually result in a range of 0.00 to 0.20 (Lambert & Ogles, 2004). In other words, the type of treatment, theoretical orientation, and/or diagnosis is less important (produces smaller effect sizes regarding outcome) than choosing to use some form of routine outcome monitoring during a course of psychotherapy.

Even more disappointing than the lack of ROM use by practicing therapists is the fact most therapists probably do not feel the need to utilize outcome measures in their daily practices. Based on the results of the current study, the prevalence rate of self-assessment bias has perhaps resulted in a minimal amount of ROM use. When most therapists believe that they are in the 70th percentile in regards to their skills, it is highly unlikely they would feel compelled to integrate routine outcome monitoring into their day-to-day practices. Moreover, when therapists also believe that 67% of their patients improve while engaged in a course of treatment with them, then ROM use would perhaps be viewed as unnecessary. However, when

considering that only 40% of therapists are using ROM tools/management systems, how do they know they belong in the 70th percentile and/or 67% of their patients improve? What type of information (data) are these therapists basing their perceived rankings upon? Unfortunately, it appears that therapists are not using data to inform their self-assessments, and are simply relying on their own judgment to determine their rates of effectiveness, which has consistently been demonstrated to be inaccurate and unreliable (Breslin, Sobell, Buchan & Cunningham, 1997; Yalom & Lieberman, 1971; Hannan et al., 2005).

Part of what makes the preceding findings so discouraging is that research has already begun to address many of these concerns. In fact, in 2015, Swift and colleagues published an article detailing how to utilize outcome monitoring tools within the process of supervision. They provided specific strategies for integrating feedback results into ongoing supervision discussions regarding patient care (Swift, Callahan, Rousmaniere, Whipple, Dexter & Wrape, 2015). Thus, examples of how to implement ROM into personal clinical practices, deliberative practices with ROM tools/management systems, and/or part of clinical supervision are already available within the pre-existing literature base. However, therapists are still choosing not to track their patient outcome.

In closing this section, it appears that therapists who were required to use ROM tools/management systems as part of their training are more likely to use ROM tools/management systems. Additionally, therapists who work in an institutionalized setting that requires supervision and/or the use of ROM tools/management systems are the therapists who are more likely to monitor their

outcome. Perhaps it is not that difficult to recognize the common thread throughout the significant findings. Simply put, the commonality amongst the findings is the *Act of Requirement*. Students/unlicensed therapists are *required* to utilize ROM tools/management systems as part of their psychotherapy training, and licensed therapists who use ROM tools/management systems are more likely to work in an institutionalized setting that *requires* the use of ROM tools/management systems. These findings raise an interesting question in regards to a field described as a "helping profession." As the title of the study suggests, do therapists really care about their patients if they must be *required* to engage in clinical practices that have been repeatedly demonstrated to improve patient outcome?

Training. At one point, the previous section posed the question, "Will more research be enough?" and while the study author believes that evidenced-based practices in psychology will continue to be informed by ongoing research, other interventions might need to be considered when hoping to combat a 40% prevalence rate of ROM use. However, despite the fact that most therapists seemed to have ignored 30 years of research evidence, are not using ROM tools/management systems, and are subject to self-assessment bias, recent research has also produced reasons for hope. As such, these reasons for "hope" will (hopefully) begin to answer the question "Will more research be enough?" and will be utilized as a starting point to discuss recommendations.

Owen, Wampold, Kopta, Rousmaniere, and Miller (2016) recently published an article examining patient outcome for trainees. While the Goldberg et al., 2016 study examined licensed therapists over time, this study explored whether or not trainees improved over time. 114 trainees, comprised of pre-doctoral interns, practicum students, and post-doctoral fellows, were examined over the course of 12 months to determine if their patient outcome improved (Owen, Wampold, Kopta, Rousmaniere, and Miller, 2016). Results suggested that trainees showed statistically significant improvement for less distressed patients and no change with more severely distressed patients (Owen, Wampold, Kopta, Rousmaniere, and Miller, 2016). Accordingly, Owen and colleagues (2016) concluded that psychotherapy training has a positive impact on patient outcome over time. While

the study did not explicitly answer the question of why trainees improve over time, the authors suggested that perhaps the overall process and components of psychotherapy training such as reviewing cases, consultation, and supervision work together to ensure positive growth (Owen, Wampold, Kopta, Rousmaniere, and Miller, 2016).

This is an encouraging finding when considering the results of the Goldberg et al. 2016 and the Rousmaniere et al., 2014 study. It appears as if therapists can in fact improve their outcome, and training (supervision?) might play a role in promoting that growth. Moreover, when combined with the results of the present study it appears as if there are specific practices that therapists can utilize if they hope to avoid falling victim to an inflated self-assessment bias and an inability to identify patient deterioration. As mentioned previously, therapists who were required to use ROM tools/management systems as part of their training are more likely to continue ROM use once licensed. Additionally, therapists who were required to attend at least two hours of weekly supervision were also more likely to utilize ROM tools/management systems.

Although not statically significant based on the adjusted alpha level $p < .003$, results examining the association of ROM use with type of degree/credential suggest that therapists who have a doctoral degree are more likely to utilize ROM tools/management systems as part of their daily practices ($p < .009$). Perhaps one reason for this is the emphasis placed upon ROM training that, as previously mentioned, is often required by outside entities such as accrediting bodies (e.g. APA). In light of these findings, it would be recommended that doctoral programs

continue to offer specific and focused training surrounding the use of ROM, and that master's level programs increase their formal training and education regarding ROM tools and management systems.

Overall, the findings from the present study suggest that training requirements play a crucial role in the continuation of ROM use once therapists are able to practice independently. Moreover, it appears that trainee status is important not because it is part of a larger academic curriculum and/or professional development, but rather it is directly linked with improving patient outcome. Thus, if therapists can perhaps continue to treat themselves as "trainees," then their rates of improvement might continue to increase versus decrease over time.

Training and Deliberate Practice. Returning to the focus of the study, which explored potential relationships between routine outcome monitoring, clinical supervision, and deliberate practice, the deliberate practice component must be addressed. Recall that Miller and colleagues (2013) define deliberate practice as follows: "Deliberate practice means setting aside time for reflecting on feedback received, identifying where one's performance falls short, seeking guidance from recognized experts, and then developing, rehearsing, executing, and evaluating a plan for improvement" (p. 92). They go onto to suggest that individuals who achieve elite status within their field of expertise, on average, engage in the deliberate practice everyday (Miller, Hubble, Chow & Seidel, 2013). Additionally, actively choosing to engage in the processes of self-reflection, planning, and practice "engenders the development of mechanisms enabling top performers to use their

knowledge in more efficient, nuanced, and novel ways than their more average counterparts" (Ericsson & Stasewski, 1989; Miller et al., 2013, p. 92).

Interestingly, while deliberate practice was a focus of the present study, it was only slightly revealed through the findings. There was only one significant finding in regards to perceived self-reflection and insight when comparing ROM users versus non-users. While this finding certainly reveals important information about therapists who engage in routine outcome monitoring, it is also the only significant result that emerged when examining factors related to deliberate practice. Overall, the SRIS revealed that the vast majority of therapists perceive themselves to be self-reflective and insightful, but it was unable to determine if those qualities were associated with routine outcome monitoring and/or clinical supervision. Furthermore, the self-assessment results suggested that therapists are overly confident in their skills as a therapist. Accordingly, this finding might suggest that perhaps therapists over-estimate their motivation for self-reflection, and/or do not feel the need to engage in deliberate practices. It should be noted however, that the current study did not explicitly inquire about deliberate practice and whether or not therapist perceive themselves engaged in those types of behaviors/activities. It is recommended that future studies continue to explore the interaction, if any, between self-reflection and insight in regards to the use and non-use of routine outcome monitoring tools/management systems.

When integrating published findings with the result from the present study, they seem to indicate that psychotherapy training and deliberate practice might be the most prevalent among trainees. Trainees are frequently required to engage in

self-reflective activities and are constantly being evaluated. Thus, deliberate practice might be interwoven within the psychotherapy training process, but becomes less important after therapists become licensed. At any rate, when considering the fact that only 40% of therapists track their outcome and that therapists within the sample believe they are better than 70% of the other therapists with similar credentials, it appears that deliberate practice is unfortunately not a routine component of their routine practices. Accordingly, it would be recommended that therapist training programs begin to deliberately consider the types of students being accepted for psychotherapy training. If therapist training experiences are as a formative as the literature suggests, then perhaps it is time for training programs to carefully evaluate the types of students who would be open to such concepts and practices such as deliberate practice and routine outcome monitoring. The current model for evaluating applicants will most likely produce excellent students, but it may not produce therapists who yield the best outcome.

Practical Recommendations. Since the majority of the present sample was comprised of licensed therapists versus unlicensed therapists/trainees, it makes sense to include recommendations regarding how licensed therapists may increase the use of ROM tools/management systems. In their recent article, Boswell, Kraus, Miller and Lambert (2015) suggested nine key points for therapists and/or agencies to consider when hoping to implement routine outcome monitoring into their daily practices: 1) Incentives could be provided to therapists to encourage the use of ROM tools/management systems such as, increased monetary gains, referrals based on

the use of ROM tools/management systems, and/or providing continuing education credits to therapists who routinely monitor their outcome and demonstrate their use of the data. 2) ROM must be simple enough not to disrupt the provision of services. This includes being mindful of the perspective of both the therapist/agency and the patient. 3) ROM tools/management systems should be flexible enough to be utilized with multiple populations. For example, can electronic ROM tools be administered via paper and pencil to be used with a patient who is unfamiliar with technology? 4) Identify a "local champion" who will be able to lead and oversee the "adoption, implementation, and sustainability" of the use of ROM tools/management systems (p. 15). 5) Combine feedback derived from ROM tools with "clinical support tools" that will assist therapists in adjusting treatment if a patient is identified at risk for deterioration and/or premature termination. 6) Utilize "bench marking" procedures that allow therapists/agencies to compare their patient outcome against other outcome data sets in order to estimate performance (p. 15). 7) Conduct more basic research to explore both the individual and systems level variables that either promote or hinder the use of ROM tools/management systems. 8) Do not conflate the Scientist-Practitioner model with being required to deliver an empirically standardized treatment. Instead, develop a Scientist-Practitioner identity, which would empower therapists to actively integrate various sources of data, such as ROM feedback, into their daily practices of psychotherapy.

The ninth and final recommendation suggested by Boswell and colleagues (2015) will be discussed in more in depth as a closing to this section. When considering the preexisting literature base indicating the effectiveness of ROM

tools/management systems and the current study results, which suggests only 40% of therapists are currently monitoring their patient outcome, it would perhaps be logical to conclude that it might be time for all therapists to be required to utilize ROM tools/management systems. However, Boswell, Kraus, Miller and Lambert (2015) suggest that "top-down" approaches toward implementing changes has a tendency to increase therapist mistrust, especially if it means potentially having to purchase a specific ROM tool/management system. In contrast, to an overarching, "top-down" requirement being externally imposed on therapists, Boswell and colleagues (2015) suggest an approach that is "more participatory, less hierarchical (top-down), and involves clinicians in the planning" (p. 14).

While the study author certainly agrees with all of the recommendations suggested by Boswell, Kraus, Miller and Lambert (2015), he would also recommend that therapists, for a moment, reflect on the process of psychotherapy itself. Donna Orange (2016), a psychoanalyst and philosopher, provides an excellent reflection:

> "Patients place their souls in the hands of clinicians in moments of excessive suffering. Then responsibility implies not only fidelity to codes of professional ethics, but much more. We are enjoined to do no harm, but harm can result when intending to do good without enough wisdom. So, clinical and professional ethics concerns difficult dilemmas that contemporary clinicians face after the demise of "standard technique" (p. 20).

She goes on to say:

> "To face soul-destroying trauma…means-to me-to consider psychotherapeutics as a moral, humanitarian, undertaking. What does this imply? Surely not the removal of practical considerations, for our concern remains always the suffering and embodied human being in context. To see psychotherapeutics (and related humanitarian work) as a moral task, I believe, leads to a focus on the concept and practice of responsibility" (p. 20).

In my opinion, Dr. Orange seeks to encourage and (re?)inspire the ethical responsibility that therapists have accepted in regards to the suffering other. Her words seem to indicate that if patients are willing to provide therapists with the privilege of holding their "souls," then perhaps therapists can respond with a level of care that honors that type of sharing (Orange, 2016). Indeed, instead of calling for additional external requirements to be placed on therapists, she advocates that therapists respond to the ethical, moral, and humanitarian call that is ignited when facing "soul-destroying trauma" (p. 20). Dr. Orange herself acknowledges that her interpretation of ethical responsibility might be rather hyperbolic. However, is implementing routine outcome monitoring into the daily practice of psychotherapy on the verge of hyperbole? Rather, it seems it is perhaps the least that therapists can do for their patients.

Chapter 9 Limitations

The current study is not without limitations. Due to the length of the document, many of the limitations were listed as the findings were discussed. However, some general limitations that apply to the study design and chosen methodology must be addressed. First, this study employed a non-experimental design and therefore any inferences regarding causality would not be appropriate. In other words, this study fails to explain relationships between measured variables and simply reveals their strength of associations (Singleton & Straits, 2010). However, this limitation was anticipated due to the exploratory nature of this particular project. Second, survey research is largely inflexible once implemented (Singleton & Straits, 2010). As such, once the survey was distributed changes could not be made to address issues relating to clarity, confusion, length, etc. Third, since its inception, survey research has always been susceptible to the "social desirability bias" or a participant's choice to answer in a manner to portray him- or herself in a positive manner (Singleton & Straits, 2010; Krosnick, 1999). During the design phase, it was discussed amongst the research team whether to include a "social desirability measure." However, after deliberating it was determined that in the case of this particular sample (i.e., working knowledge of research methodologies, awareness of biases, etc.) that adding a social desirability measure would not produce any meaningful results above or beyond what was already being measured. Finally, due to the use of a survey, measurement error is likely to have occurred from questions being misunderstood, participants' inability to remember past

events, and the fluid nature of thoughts, opinions, feelings, attitudes, etc. (Singleton & Straits, 2010).

Further limitations arise when considering the sampling procedures. Non-probability sampling reveals a number of limitations. First, as opposed to probability or random sampling, convenience sampling greatly reduces external validity (Singleton & Straits, 2010). Second, convenience sampling is subject to selection bias and precludes the ability to calculate sampling error (Singleton & Straits, 2010). Finally, convenience sampling acts upon the assumption that the study designers possess in-depth and comprehensive knowledge of the phenomenon in question. This, of course, is of particular concern when set against the self-assessment bias.

Finally, it should be highlighted that the findings of this study are limited to the sampled population and, therefore, might suffer from a lack of cultural diversity. Indeed, minority populations are frequently underrepresented within the literature of psychology (Henrich, Heine & Norenzayan, 2010). Moreover, Matsumoto (2000) has detailed the effects of culture on research and data analysis. Thus, while every attempt was taken to ensure a culturally diverse sample, this study appears to largely have been based on the self-reports of individuals from "Western, Educated, Industrialized, Rich, and Democratic" countries (Henrich, Heine & Norenzayan, 2010). Thus, any attempt to generalize findings to minority populations would be inappropriate.

Chapter 10 Future Directions

The study author would suggest that the present study is an initial, exploratory examination of the possible relationship between routine outcome monitoring, clinical supervision, and self-reflection/insight, which are components of deliberate practice. Other studies that explored these three variables were unable to be identified. While suggestions for future research were provided within the earlier discussion sections, the following recommendations attempt to extend the implications in hopes of further contributing to the field of psychotherapy research.

Future studies should begin to examine the unique factors embedded within clinical training programs, systems of care, and assumed foundational aspects of psychotherapy, e.g., clinical supervision. For example, this study seems to hint at the fact that self-assessment bias is not something that reduces with training or ceases to exist upon obtaining licensure. Thus, training programs may want to consider screening (if possible) for intra-psychic and interpersonal characteristics that would most likely contribute to the willingness to engage in ROM training and use. Some studies show humility might be a critical personality factor (Hook, Davis, Owen, Worthington & Utsey, 2013). Future studies could also assist in providing training programs with information in regards to what the optimal amount of formal training is necessary in order for their students to maintain ROM use after licensure. Additionally, findings from this study suggest that more research must be conducted to explore why therapists continue to utilize ROM tools/management systems even

after becoming independently licensed. In essence, do therapists choose to engage in routine outcome monitoring simply because it is a requirement or is it somehow connected with self-reflection, insight building, and deliberate practice? Furthermore, how these components either indicate deliberate practice and/or intersect with deliberate practice is yet to be determined. Finally, future studies should continue to focus on providing real time feedback to therapists in an effort to determine what makes psychotherapy work, and how as a field of both researchers and practitioners can work together in order to make it better.

Chapter 11 Conclusion

Fortunately, psychotherapy has become an accepted and effective form of treatment for a variety of mental health conditions. Toward that goal, many individuals have pursued psychotherapy as a career and are currently engaged in providing psychotherapy services. Unfortunately, however, despite the effectiveness of psychotherapy, positive results are not guaranteed. Thus, it remains important that therapists continue to solicit feedback from their patients in hopes of reducing premature termination and patient deterioration. Indeed, therapists must decide how they are determining whether their treatments are effective, and how they are identifying patient non-responders. Research would suggest that clinical judgment alone is insufficient. As such, routine outcome monitoring must become a component of daily clinical practice and future research must continue to examine why so few therapists are choosing not to track their patient outcome with valid and reliable measures.

The beginning of the discussion section featured a quote from Dr. Michael Lambert. He stated that, "Yes, it is time for clinicians to routinely monitor treatment outcome." Interestingly, that same quote was the title of a chapter he wrote in 2010 (Lambert, 2010). Thus, after numerous research projects and publications, Dr. Lambert began imploring therapists to begin implementing outcome tools into their daily practices in order to prevent treatment failures. Apparently, however, it appears as if 60% of therapists are responding to Dr. Lambert's plea with a resounding "No."

References

American Psychological Association. (2016). 2015 survey of psychology health service providers. Washington, DC: Author.

American Psychological Association. (2006). Evidence-based practice in psychology. *American Psychologist, 61*, 271-285.

American Psychological Association. (2013). Recognition of psychotherapy effectiveness. *Psychotherapy*, *50*, 102-109.

American Psychological Association, Commission on Accreditation. (2013). *Guidelines and principles for accreditation of programs in professional psychology*. Washington, DC: American Psychological Association.

Asselin, M. E., & Fain, J. A. (2013). Effect of reflective practice education on self-reflection, insight, and reflective thinking among experienced nurses: A pilot study. *Journal for nurses in professional development*, *29*, 111-119.

Atwood, G. E. & Stolorow, R. D. (1993). *Faces in a cloud*. Northvale, NJ: Jason Aronson, Inc.

Australian Psychological Society. (2003). *APS ethical guidelines: Guidelines on supervision*. Retrieved from http://www.psychology.org.au/Assets/Files/guidelines_on_supervision.pdf

Barkham, M., Margison, F., Leach, C., Lucock, M., Mellor-Clark, J., et al. (2001). Service profiling and outcome benchmarking using the CORE-OM: Toward practice-based evidence practice in psychology. *American Psychologist, 61*, 184-196.

Barkham, M. & Mellor-Clark, J. (2003). Bridging evidence-based practice and practice-based evidence: Developing a rigorous and relevant knowledge for the psychological therapies. *Clinical Psychology and Psychotherapy, 10*, 319-327.

Barkham, M., Mellor-Clark, J., Connell, J. & Cahill, J. (2006). A core approach to practice-based evidence: A brief history of the origins and applications of the CORE-OM and CORE System. *Counseling and Psychotherapy Research, 6*, 3-15.

Bazeley, P. (2013). *Qualitative data analysis: Practical strategies*. Thousand Oaks, CA: Sage.

Berk, M. & Parker, G. (2009). The elephant on the couch: Side-effects of psychotherapy. Australian and New Zealand Journal of Psychiatry, 43, 787-794.

Bergin, A. E. (1971). The evaluation of therapeutic outcome. In A. E. Bergin & S. L. Garfield (Eds.). *Handbook of psychotherapy and behavior change* (pp. 217-270). New York: Wiley.

Bohanske, R. T. & Franczak, M. (2010). Transforming public behavioral health care: A case example of consumer-directed services, recover, and the common factors. In Duncan, B., L., Miller, S., D., Wampold, B., E., Hubble, M., A. (Eds.), *The heart and soul of change: Delivering what works in therapy* (2nd ed.). (pp. 299-322). Washington, D.C.: American Psychological Association.

Bootzin, R. R. & Bailey, E. T. (2005). Understanding placebo, nocebo, and iatrogenic treatment effects. *Journal of Clinical Psychology, 61*, 871-880.

Boswell, J. F., Kraus, D. R., Miller, S. D., & Lambert, M. J. (2015). Implementing routine outcome monitoring in clinical practice: Benefits, challenges, and solutions. *Psychotherapy research*, *25*, 6-19.

Bernard, J. M. & Goodyear, R. K. (2004). *Fundamentals of clinical supervision*. Boston, MA: Pearson Education, Inc.

Breslin, F., Sobell, L.C., Buchan, G. & Cunningham, J. (1997). Toward a stepped-care approach to treating problem drinkers: The predictive validity of within treatment variables and therapist prognostic ratings. *Addiction, 92*, 1479-1489.

Brown, G. S., Burlingame, G. M., Lambert, M. J., Jones, E. & Vaccaro, J. (2001). Pushing the quality envelope: A new outcome management system. *Psychiatric Services, 52*, 925-934.

Brown, G. S. & Jones, E. R. (2005). Implementation of a feedback system in a managed care environment: What are patients teaching us? *Journal of Clinical Psychology, 61*, 187-198.

Brown, G. S., Lambert, M. J., Jones, E. R. & Minami, T. (2005). Identifying highly effective psychotherapists in a managed care environment. *American Journal of Managed Care, 11*, 513-520.

Carlier, I. V. E., Meuldijk, D., Vliet, I. M. V., Fenema, E. V., Van der Wee, N. J. A. & Zitman, F. G. (2010). Routine outcome monitoring and feedback on physical or mental health status: Evidence and theory. *Journal of Evaluation in Clinical Practice, 18*, 104-110.

Castonguay, L., Barkham, M., Lutz, W. & McAleavey, A. (2013). Practice-oriented research: Approaches and applications. In M. J. Lambert (Eds.), *Bergin and Garfield's handbook of psychotherapy and behavior change.* (6th ed.). (pp. 85-133). Hoboken, New Jersey: John Wiley & Sons, Inc.

Christensen, L. L., Russell, C. S., Miller, R. B., & Peterson, C. M. (1998). The process of change in couples therapy: A qualitative investigation. *Journal of Marital and Family Therapy, 24*, 177-183.

Clarke, G. N. (1995). Improving the transition from basic efficacy research to effectiveness studies: Methodological issues and procedures. *Journal of Consulting and Clinical Psychology, 63*, 718-725.

Cohen, J. (1988). Statistical power analysis for the behavioral sciences. (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.

Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*, 155-159.

Cook, J. M., Biyanova, T., Elhai, J., Schnurr, P. P., & Coyne, J. C. (2010). What do psychotherapists really do in practice? An Internet study of over 2,000 practitioners. *Psychotherapy: Theory, Research, Practice, Training*, *47*, 260-267.

Davidson, K., Perry, A. & Bell, L. (2015). Would continuous feedback of patient's clinical outcome to practitioners improve NHS psychological therapy services? Critical analysis and assessment of quality of existing studies. *Psychology and Psychotherapy: Theory, Research and Practice, 88*, 21-37.

De Jong, K. & De Goede, M. (2015). Why do some therapist not deal with outcome monitoring feedback? A feasibility study on the effect of regulatory focus and person-organization fit on attitude and outcome. *Psychotherapy Research, 25*, 661-668.

De Jong, K., van Sluis, P., Nugter, M. A., Heiser, W. J., & Spinhoven, P. (2012). Understanding the differential impact of outcome monitoring: Therapist variables that moderate feedback effects in a randomized clinical trial. *Psychotherapy Research, 22*, 464 – 474.

Duncan, B. L. & Miller, S. D. (2008). *The Outcome and Session Rating Scales: The Revised Administration and Scoring Manual, Including the Child Outcome Rating Scale*. Chicago: Institute for the Study of Therapeutic Change.

Dunning, D., Heath, C. & Suls, J. (2004). Flawed self-assessment: Implications for health, education, and the workplace. *Psychological Science in the Public Interest, 5*, 69-106.

Dupree, W. J., White, M. B., Olsen, C. S. & Lafleur, C. T. (2007). Infidelity treatment patterns: A practice-based evidence approach. *The American Journal of Family Therapy, 35*, 327-341.

Ehrlinger, J., & Dunning, D. (2003). How chronic self-views influence (and potentially mislead) estimates of performance. *Journal of personality and social psychology*, *84*, 5.

Ehrlinger, J., Johnson, K., Banner, M., Dunning, D., & Kruger, J. (2008). Why the unskilled are unaware: Further explorations of (absent) self-insight among the incompetent. *Organizational behavior and human decision processes*, *105*, 98-121.

Elaad, E. (2003). Effects of feedback on the overestimated capacity to detect lies and the underestimated ability to tell lies. *Applied Cognitive Psychology, 17*, 349-363.

Elliott, R., Fischer, C. & Rennie D. (1999). Evolving guidelines for publication of qualitative research studies in psychology and related fields. *British Journal of Clinical Psychology, 38*, 215–229.

Ericsson, K. A. (1996). The acquisition of expert performance: An introduction to some of the issues. In K. A. Ericsson (Ed.), *The road to excellence: The acquisition of expert*

performance in the arts and sciences, sports, and games (pp. 1–50). Mahwah, NJ: Lawrence Erlbaum Associates.

Ericsson, K. A. (2006). The Influence of experience and deliberate practice on the development of superior expert performance. In K. A. Ericsson, N. Charness, P. J. Feltovich & R. R. Hoffman (Eds.), *The Cambridge handbook of expertise and expert performance* (pp. 683–703). Cambridge: Cambridge University Press.

Ericsson, K. A. (2009). Enhancing the development of professional performance: Implications from the study of deliberate practice. In Development of professional expertise: Toward measurement of expert performance and design of optimal learning environments (pp. 405– 431). New York: Cambridge University Press.

Ericsson, K. A., Krampe, R. T., & Tesch-Romer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review, 100*, 363– 406.

Ericsson, K. A., & Staszewski, J. (1989). Skilled memory and expertise: Mechanisms of exceptional performance. In D. Klahr & K. Kotovsky (Eds.), *Complex information processing: The Impact of Herbert A. Simon* (pp. 265–268). Hillsdale, NJ: Lawrence Erlbaum.

Falender, C. A. & Shafranske, E. P. (2004). *Clinical supervision: A competency-based approach*. Washington, D.C.: American Psychological Association.

Finch, A. E., Lambert, M. J. & Schaalje, B. G. (2001). Psychotherapy quality control: The statistical generation of expected recovery cures for integration into an early warning system. *Clinical Psychology and Psychotherapy, 8*, 231-242.

Garb, H. N. (1998). Studying the clinician: Judgment research and psychological assessment. Washington, DC: APA.

Garb, H. N. (2005). Clinical judgment and decision making. *Annual Review of Clinical Psychology, 1*, 67-89.

Gartlehner, G., Hansen, R. A., Nissman, D., Lohr, K. N. & Carey, T. S. (2006). A simple and valid tool distinguished efficacy from effectiveness studies. *Journal of Clinical Epidemiology, 59*, 1040-1048.

Goldberg, S. B., Rousmaniere, T., Miller, S. D., Whipple, J., Nielsen, S. L., Hoyt, W. T., & Wampold, B. E. (2016). Do psychotherapists improve with time and experience? A longitudinal analysis of outcome in a clinical setting. *Journal of counseling psychology*, *63*, 1-11.

Google, Inc. (2017). *Google Scholar*. Retrieved from https://scholar.google.com/

Grant, A. M., Franklin, J. & Langford, P. (2002). The self-reflection and insight scale: A new measure of private self-consciousness. *Social Behavior and Personality, 30*, 821-836.

Grove, W.G., Zald, D.H., Lebow, B. Snitz, B. & Nelson, C. (2000). Clinical versus statistical prediction: A meta-analysis. *Psychological Assessment, 12*, 19-30.

Hannan, C., Lambert, M. J., Harmon, C., Nielsen, S. L., Smart, D. W., & Shimokawa, K. (2005). A lab test and algorithms for identifying clients at risk for treatment failure. *Journal of Clinical Psychology/In Session, 61*, 1-9.

Hansen, N. B., Lambert, M. J., & Forman, E. M. (2002). The psychotherapy dose-response effect and its implications for treatment delivery services. *Clinical Psychology: Science and Practice, 9*, 329-343.

Hatfield, D., McCullough, L., Frantz, S. H. B. & Krieger, K. (2010). Do we know when our clients get worse? An investigation of therapists' ability to detect negative client change. *Clinical Psychology and Psychotherapy, 17*, 25-32.

Hatfield, D. R., & Ogles, B. M. (2004). The use of outcome measures by psychologists in clinical practice. *Professional Psychology Research and Practice*, *35*, 485-491.

Hatfield, D. R., & Ogles, B. M. (2007). Why some clinicians use outcome measures and others do not. *Administration and policy in mental health and mental health services research*, *34*, 283-291.

Harmon, S. C., Lambert, M. J., Smart, D. W., Hawkins, E. J., Nielsen, S. L., Slade, K., & Lutz, W. (2007). Enhancing outcome for potential treatment failures: Therapist/client feedback and clinical support tools. *Psychotherapy Research, 17*, 379-392.

Henrich, Heine, & Norenzayan (2010). The weirdest people in the world? *Behavioral and Brain Sciences, 33* (2-3), 61-83.

Hoagwood, K., Hibbs, E, Brent, D. & Jensen, P. (1995). Introduction to special section: Efficacy and effectiveness in studies of child and adolescent psychotherapy. *Journal of Consulting and Clinical Psychology, 63*, 683-687.

Hook, J. N., Davis, D. E., Owen, J., Worthington Jr, E. L., & Utsey, S. O. (2013). Cultural humility: Measuring openness to culturally diverse clients. *Journal of Counseling Psychology*, *60*, 353.

Howard, K. I., Moras, K., Brill, P. L., Martinovich, Z. & Lutz, W. (1996). Evaluation of psychotherapy: Efficacy, effectiveness, and patient progress. *American Psychologist, 51*, 1059-1064.

Hunsley, J. & Lee, C. M. (2007). Research-informed benchmarks for psychological treatments: Efficacy studies, effectiveness studies, and beyond. *Professional Psychology: Research and Practice, 38*, 21-33.

Knaup, C., Koesters, M., Schoefer, D., Becker, T. & Puschner, B. (2009). Effect of feedback of treatment outcome in specialist mental healthcare: Meta-analysis. *The British Journal of Psychiatry, 195*, 15-22.

Kordy, H., Hannöver, W. & Richard, M. (2001). Computer-assisted feedback-driven quality management ofr psychotherapy: The Stuttgart-Heidelberg model. *Journal of Consulting and Clinical Psychology, 69*, 173-183.

Krageloh, C. U., Czuba, K. J., Billington, D. R., Kersten, P. & Siegert, R. J. (2015). Using feedback from patient-reported outcome measures in mental health services: A scoping study and typology. *Psychiatric Services, 66*, 224-241.

Kraus, D. R. & Horan, F. P. (1999). Outcome roadblocks: Problems and Solutions. *Behavioral Health Management, 17*, 22-26.

Krosnick, J. A. (1999). Survey research. *Annual review of psychology*, *50*, 537-567.

Lambert, M. J. (2010). Yes, it is time for clinicians to routinely monitor treatment outcome. In Duncan, B., L., Miller, S., D., Wampold, B., E., Hubble, M., A. (Eds.), *The heart and soul of change: Delivering what works in therapy* (2nd ed.). (pp. 239-266). Washington, D.C.: American Psychological Association.

Lambert, M. J. (2013). The efficacy and effectiveness of psychotherapy. In M. J. Lambert (Eds.), *Bergin and Garfield's handbook of psychotherapy and behavior change.* (6th ed.). (pp. 169-218). Hoboken, New Jersey: John Wiley & Sons, Inc.

Lambert, M. J., Bergin, A. E. & Collins, J. L. (1977). Therapist induced deterioration in psychotherapy patients. In A. S. Gurman & A. M. Razin (Eds.)., *Effective psychotherapy: A handbook of research*. (pp. 452-481). New York: Pergamon Press.

Lambert, M. J., Bergin, A. E., & Garfield, S. L. (2004). Introduction and historical overview. In M. J. Lambert (Ed.), *Bergin and Garfield's handbook of psychotherapy and behavior change* (5th ed.). (pp. 3–15). New York: Wiley.

Lambert, M. J., Hansen, N. B. & Finch, A. E. (2001). Patient-focused research: Using patient outcome data to enhance treatment effects. *Journal of Consulting and Clinical Psychology, 69*, 159-172.

Lambert, M. J., Morton, J. J., Hatfield, D., Harmon, C., Hamilton, S., Reid, R. C., et al. (2004). *Administration and scoring manual for the Outcome Questionnaire -45.2*. Orem, UT: American Credentialing Services.

Lambert, M. J. & Ogles, B. M. (1997). The effectiveness of psychotherapy supervision. In C. E. Watkins, Jr. (Ed.), *Handbook of psychotherapy supervision* (pp. 421 – 446). New York: Wiley & Sons, Inc.

Lambert, M. J. & Ogles, B. M. (2004). The efficacy and effectiveness of psychotherapy. In M. J. Lambert (Eds.), *Bergin and Garfield's handbook of psychotherapy and behavior change.* (6th ed.). (pp. 139-193). Hoboken, New Jersey: John Wiley & Sons, Inc.

Lambert, M. J. & Shimokawa, K. (2011). Collecting client feedback. *Psychotherapy, 48*, 72-79.

Lambert, M. J., Whipple, J. L., Smart, D. W., Vermeersch, D. A., Nielsen, S. L. & Hawkins, E. J. (2001). The effects of providing therapists with feedback on patient progress during psychotherapy: Are outcome enhanced? *Psychotherapy Research, 11*, 49-68.

Lambert, M. J., Whipple, J. L., Harmon, C., Shimokawa, K., Slade, K., et al. (2004). *Clinical Support Tools Manual for the Outcome Questionnaire-45*. Orem, UT: American Professional Credentialing Services.

Lambert, M. J., Whipple, J. L., Vermeersch, D. A., Smart, D. W., Hawkins, E. J., Nielsen, S. L. & Goates, M. (2002). Enhancing psychotherapy outcome via providing feedback on client progress: A replication. *Clinical Psychology and Psychotherapy, 9*, 91-103.

Laska, K. M., Gurman, A. S. & Wampold, B. E. (2014). Expanding the lens of evidence-based practice in psychotherapy: A common factors perspective. *Psychotherapy, 51*, 467-481.

Lilienfeld, S. O. (2007). Psychological treatments that cause harm. *Perspectives on Psychological Science, 2*, 53-70.

Lucock, M., Leach, C., Iveson, S., Lynch, K., Horsefield, C. & Hall, P. (2003). A systematic approach to practice-based evidence in a psychological therapies service. *Clinical Psychology and Psychotherapy, 10*, 389-399.

Lutz, W. De Jong, K. & Rubel, J. (2015). Patient-focused and feedback research in psychotherapy: Where are we and were do we want to go? *Psychotherapy Research, 25*, 625-632.

Lutz, W., Lambert, M. J., Harmon, S. C., Stulz, N., Tschitsaz, A. & Schürch, E. (2006). The probability of treatment success, failure, and duration-What can be learned from empirical data to support decision making in clinical practice? *Clinical Psychology and Psychotherapy, 13*, 223-232.

Lutz, W., Martinovich, Z., Howard, K. I. & Leon, S. C. (2002). Outcome management, expected treatment response, and severity-adjusted provider profiling in outpatient psychotherapy. *Journal of Clinical Psychology*, *58*, 1291-1304.

Margison, F., Barkham, M., Evans, C., McGrath, G., Mellor-Clark, J. & Audin, K. (2000). Measurement and psychotherapy: Evidence based practice and practice-based evidence. *British Journal of Psychiatry, 177*, 123-130.

Matsumoto, David (2000). *Cultural Influences on Research Methods and Statistics.* Waveland Press Inc.

Marty, D., Rapp, C. A., McHugo, G. J., & Whitley, R. (2008). Factors influencing consumer outcome monitoring in implementation of evidence-based practices: Results for the national EBP implementation project. *Administration Policy Mental health, 35*, 204-211.

Meyer, H. (1980). Self-appraisal of job performance. *Personnel Psychology, 33*, 291-295.

Midgley, N., Holmes, J., Parkinson, S., Stapley, E., Eatough, V., & Target, M. (2016). "Just like talking to someone about like shit in your life and stuff, and they help you": Hopes and expectations for therapy among depressed adolescents. *Psychotherapy Research*, *26*, 11-21.

Miller, S.D., Duncan, B.L., Sorrell, R., & Brown, G. S. (2005). The Partners for Change Outcome Management System. *Journal of Clinical Psychology, 61*, 199-208.

Miller, S. D., Hubble, M. A., Chow, D. L. & Seidel, J. A. (2013). The outcome of psychotherapy: Yesterday, today, and tomorrow. *Psychotherapy, 50*, 88-97.

Moos, R. H. (2005). Iatrogenic effects of psychosocial interventions for substance use disorders: Prevalence, predictors, prevention. *Addiction, 100*, 595-604.

Moos, R. H. (2012). Iatrogenic effects of psychosocial interventions: Treatment, life context, and personal risk factors. *Substance Use & Misuse, 47*, 1592-1598.

Norcross, J. C. (2003). Empirically supported therapy relationships. In J. C. Norcross (Ed.), *Psychotherapy relationships that work* (pp. 3-16). New York: Oxford University Press.

O'Donovan, A., Halford, W. K., & Walters, B. (2011). Towards best practice supervision of clinical psychology trainees. *Australian Psychologist, 46*, 101-112.

Ogles, B. M. (2013). Measuring change in psychotherapy research. In M. J. Lambert (Eds.), *Bergin and Garfield's handbook of psychotherapy and behavior change.* (6th ed.). (pp. 134-166). Hoboken, New Jersey: John Wiley & Sons, Inc.

Ogren, M. L., Jonnson, C. O., & Sundin, E. (2005). Group supervision in psychotherapy. The relationship between focus, group climate and perceived attained skill. *Journal of Clinical Psychology, 61*, 373-389.

Orange, D. M. (2016). *Nourishing the inner life of clinicians and humanitarians: The ethical turn in psychoanalysis*. New York: Routledge.

Owen, J., Wampold, B. E., Kopta, M., Rousmaniere, T., & Miller, S. D. (2016). As good as it gets? Therapy outcomes of trainees over time. *Journal of counseling psychology*, *63*, 12.

Phelps, R., Eisman, E. J., & Kohout, J. (1998). Psychological practice and managed care: Results of the CAPP practitioner survey. *Professional Psychology: Research and Practice, 29*, 31–36.

Poston, J. M. & Hanson, W. E. (2010). Meta-analysis of psychological assessment as a therapeutic intervention. *Psychological Assessment, 22*, 203-212.

Reese, R. J., Usher, E. L., Bowman, D. C., Norsworthy, L. A., Halstead, J. L., Rowlands, S. R. & Chisholm, R. R. (2009). Using client feedback in psychotherapy training: An analysis of its influence on supervision and counselor self-efficacy. *Training and Education in Professional Psychology, 3*, 157-168.

Roberts, C., & Stark, P. (2008). Readiness for self-directed change in professional behaviours: Factorial validation of the Self-reflection and Insight Scale. *Medical Education*, *42*, 1054-1063.

Rousmaniere, T. G., Swift, J. K., Babins-Wagner, R., Whipple, J. L. & Berzins, S. (2014). Supervisor variance in psychotherapy outcome in routine practice. *Psychotherapy Research, 26*, 195-205.

Rosenzweig, S. (1936). Some implicit common factors in diverse methods of psychotherapy. *American Journal of Orthopsychiatry, 6*, 412-415.

Rychlak, J. F. (1981). *Introduction to personality and psychotherapy: A theory construction approach* (2nd ed.). Boston: Houghton Mifflin.

Seligman, M. E. P. (1995). The effectiveness of psychotherapy: The consumer reports study. *American Psychologist, 50*, 965-974.

Shimokawa, K., Lambert, M. J., & Smart, D. W. (2010). Enhancing treatment outcome of patients at risk of treatment failure: Meta-analytic and mega-analytic review of psychotherapy quality assurance system. *Journal of Consulting and Clinical Psychology, 78*, 298-311.

Singleton, R. A. & Straits, B. C. (2010). *Approaches to social research*. (5th ed.). New York, NY: Oxford University Press, Inc.

Simon, W., Lambert, W. J., Harris, M. W., Busath, G. & Vazquez, A. (2012). Providing patient progress information and clinical support tools to therapists: Effects on patients at risk of treatment failure. *Clinical Psychology & Psychotherapy, 22,* 638-647.

Smith, J. A., Flowers, P. & Larkin, M. (2009). *Interpretative phenomenological analysis*. London: Sage.

Smith, M. L., Glass, G. V. & Miller, T. I. (1980). *The benefits of psychotherapy*. Baltimore: Johns Hopkins University Press.

Smits, D. F., Claes, L., Stinckens, N. & Smits, D. J. M. (2015). Clinicians' attitudes towards outcome and process monitoring: A validation of the Outcome Measurement Questionnaire. *Administration and Policy in Mental Health and Mental Health Services Research, 42*, 634-641.

Stamm, B. H., Metrick, S. L., Kenkel, M. B., Davenport, J. A., Davenport III, J., Hudnall, A. C., Ruth, A. W., Higson-Smith, C. & Markstrom, C. A. (2003). Introduction. In Stamm, B. H. (1st Ed.), *Rural behavioral health care: An interdisciplinary guide* (pp. 3-10). Washington, D.C.: American Psychological Association.

Stein, D. & Grant, A. M. (2014). Disentangling the relationships among self-reflection, insight, and subjective well-being: The role of dysfunctional attitudes and core self-evaluations. *The Journal of Psychology, 00*, 1-18.

Stolorow, R. D. (2013). Intersubjective-systems theory: A phenomenological-contextualist psychoanalytic perspective. *Psychoanalytic Dialogues, 23*, 383-389.

Stricker, G., Troy, W. G. & Shueman, S. A. (2000). *Handbook of quality management in behavioral health*. New York: Kluwer/Plenum Press.

Substance Abuse and Mental Health Services Administration. (2016). *National Registry of Evidence-Based Programs and Practices*. Retrieved from http://www.nrepp.samhsa.gov/02_about.aspx

SurveyMonkey, Inc. (2017). *SurveyMonkey*. Retrieved from https://www.surveymonkey.com/

Swift, J. K., Callahan, J. L., Rousmaniere, T. G., Whipple, J. L., Dexter, K., & Wrape, E. R. (2015). Using Client Outcome Monitoring as a Tool for Supervision. *Psychotherapy*, *52*, 180-185.

Swift, J. K., Greenberg, R. P., Whipple, J. L., & Kominiak, N. (2012). Practice recommendations for reducing premature termination in therapy. *Professional Psychology: Research and Practice, 43*, 379-387.

The British Psychological Society. (2006). *Continued supervision policy document*. Retrieved from https://www.bps.org.uk/system/files/userfiles/Society%20Member/rep31policy_web.pdf

Todd, T. & Holden, E. (2012). AAMFT's All Member Survey: A summary. *The American Association for Marriage and Family Therapy Family Therapy Magazine*, 10-60.

Walfish, S., McAlister, B., O'Donnell, P. & Lambert, M. J. (2012). An investigation of self-assessment bias in mental health providers. *Psychological Reports, 110*,1-6.

Wampold, B.E. (2007). Psychotherapy: The humanistic (and effective) treatment. *American Psychologist, 62*, 857-873.

Warner, R. (2013). *Applied Statistics: From Bivariate Through Multivariate Techniques.* Sage.

Wells, K. B. (1999). Treatment research at the crossroads: The scientific interface of clinical trials and effectiveness research. *American Journal of Psychiatry, 156*, 5-10.

Whipple, J. L., & Lambert, M. J. (2011). Outcome measures for practice. *Annual Review of Clinical Psychology, 7*, 87-111.

Whipple, J. L., Lambert, M. J., Vermeersch, D. A., Smart, D. W., Nielsen, S. L. & Hawkins, E. J. (2003). Improving the effects of psychotherapy: The use of early identification of treatment failure and problem-solving strategies in routine practice. *Journal of Counseling Psychology, 50*, 59-68.

Whitaker, T., Weismiller, T., & Clark, E. (2006). *Assuring the sufficiency of a frontline workforce: A national study of licensed social workers. Executive summary*. Washington, DC: National Association of Social Workers.

Worthen, V. E., & Lambert, M. J. (2007). Outcome oriented supervision: Advantages of adding systematic client tracking to supportive consultations. *Counseling and Psychotherapy Research, 7,* 48-53.

Yalom, I. D. & Lieberman, M. A. (1971). A study of encounter group casualties. *Archives of General Psychiatry, 25*, 16-30.

Yates, D., Moore, D. & McCabe, G. (1999). *The Practice of Statistics* (1st Ed.). New York: W.H. Freeman.

Appendix

UNIVERSITY OF ALASKA FAIRBANKS

(907) 474-7800
(907) 474-5444 fax
uaf-irb@alaska.edu
www.uaf.edu/irb

Institutional Review Board

909 N Koyukuk Dr. Suite 212, P.O. Box 757270, Fairbanks, Alaska 99775-7270

March 27, 2017

To:	Jason Whipple, Ph.D. Principal Investigator
From:	University of Alaska Fairbanks IRB
Re:	[893433-2] ROUTINE OUTCOME MONITORING AND CLINICAL SUPERVISION

Thank you for submitting the Continuing Review/Progress Report referenced below. The submission was handled by Exempt Review. The Office of Research Integrity has determined that the proposed research qualifies for exemption from the requirements of 45 CFR 46. This exemption does not waive the researchers' responsibility to adhere to basic ethical principles for the responsible conduct of research and discipline specific professional standards.

Title:	ROUTINE OUTCOME MONITORING AND CLINICAL SUPERVISION
Received:	March 25, 2017
Exemption Category:	*2*
Effective Date:	March 27, 2017

This action is included on the April 5, 2017 IRB Agenda.

Prior to making substantive changes to the scope of research, research tools, or personnel involved on the project, please contact the Office of Research Integrity to determine whether or not additional review is required. Additional review is not required for small editorial changes to improve the clarity or readability of the research tools or other documents.