

Therapists' use of Routine Outcome Monitoring (ROM) in Clinical Practice: A Qualitative
Multiple Case Study

by

Hansen Zhou

A thesis submitted in partial fulfilment of the requirements for the degree of

Doctor of Education

in

Counselling Psychology

Department of Counselling Psychology

University of Alberta

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Abstract

Routine outcome monitoring (ROM) has been shown to have a significant effect on clinical outcome. However, the process behind the effect of ROM intervention is not well understood. In this qualitative dissertation study, the process of experienced users of ROM was explored. A multiple case study design was used to obtain a detailed descriptive understanding of six purposefully sampled clinicians' ROM process. Data were collected using semi-structured interviews and analyzed using an iterative and thematic approach to identify cross-case themes that speak to a descriptive understanding of the process. The results showed that participants used ROM with nearly every client and every session. Participants viewed ROM as a tool for facilitating client engagement. They described how ROM encouraged collaboration between clinician and client as well as providing opportunities for in-depth conversations about therapy progress and therapeutic process. In interpreting ROM scores, participants framed client's scores based on previous scores and personal context. Participants discussed factors facilitating the implementation of ROM such as organizational adoption, electronic feedback tools, and client acceptability. They also discussed barriers to ROM implementation such as time and resource burden, lack of feedback culture, and client demand characteristics. Findings are discussed in the context of wider empirical literature on ROM process. Future directions for research are outlined and the clinical implications are stated.

Preface

This thesis is an original work by Hansen Zhou. No part of this thesis has been previously published. The research project, of which this thesis is a part, received research ethics approval from the University of Alberta Research Ethics Board, project name “Therapists use of routine outcome monitoring (ROM) in clinical practice: A qualitative multiple case study.” No. Pro00087074, January 28, 2019.

Acknowledgements

I would like to thank my co-supervisors, Dr. Bill Hanson and Dr. Derek Truscott. Your guidance and support were invaluable to the completion of this dissertation. Your mentorship has helped me grow a lot in my research and clinical skills. I would also like to thank my committee members, Dr. Robbie Babins-Wagner, Dr. Kevin Wallace, Dr. Damien Cormier, Dr. George Buck, Dr. Bill Hanson and Dr. Derek Truscott. Your interest and consideration for my research project was greatly appreciated. I am thankful for your kindness and interest during my defence.

I would also like to share my gratitude and appreciation to the six research participants who volunteered their knowledge, insight, and time for this research study. I would also like to thank my family – my parents and younger brother, for your patience and assistance over the years of my education. I also have a great appreciation for the help and support of many people throughout my education.

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Glossary of Terms

Clinically Significant Change: A change in a client's performance that can be shown to result from treatment rather than measurement error and that takes the client from the score is typical of a problematic, dysfunctional individual to a typical, normal individual.

Collaborative/Therapeutic Assessment: An approach to psychological assessment to aspire to help clients and conduct assessments in a collaborative and respectful manner.

Common Factors Theory: Theory that proposes different approaches and evidence-based practices in psychotherapy share commonalities that account for the most of the effectiveness of treatment.

CORE-Outcome Measure: A psychometrically sound 34-item generic measure of psychological distress that is pan-theoretical and pan-diagnostic.

Deliberate Practice: Practice that is purposeful, systematic, consists of focused attention, and is conducted with the specific goal of improved performance.

Feedback-Informed Treatment: Using measures to solicit feedback from clients about the progress of treatment and the quality of the therapeutic relationship. This approach is trans-theoretical and evidence-based.

Not-On-Track (NOT): Clients identified through routine outcome monitoring that are at-risk for deterioration because of their trajectory of change based on the expected trajectory of change.

On-Track (OT): Clients identified through routine outcome monitoring that are progressing as expected based on their expected trajectory of change.

Outcome Questionnaire 45.2 (OQ-45): A psychometrically sound 45-item self-report inventory used to measure psychotherapy progress in adult clients.

Outcome Rating Scale (ORS): A psychometrically sound 4-item brief outcome measure to measure psychotherapy progress.

Reliably Significant Change: A change in a client's performance that can be shown to be from a result that is greater than measurement error.

Routine Outcome Monitoring (ROM): Periodic measurement of client variables that inform the clinician with feedback.

Self-Determination Theory: Broad theoretical framework of human motivation and personality. The framework defines intrinsic and extrinsic sources of motivation. Conditions supporting autonomy, competence, and relatedness foster highest quality of motivation and engagement.

Session Rating Scale (SRS): A psychometrically sound 4-item brief measure of therapeutic alliance.

Chapter 1. Introduction

This dissertation study explores the topic of routine outcome monitoring (ROM), specifically, the scarcely studied topic of the process of ROM i.e. how clinicians use ROM in practice and how ROM use causes changes in therapy.

Psychotherapy is effective – that much is all but certain, as there is now a voluminous body of research demonstrating that nearly 80% of people that engage in psychotherapy are better off than those who do not (Wampold, 2011). However, the reasons why psychotherapy is effective, the factors that contribute to its effectiveness, and the methods of how to train therapists to be competent in delivering psychotherapy is somewhat less clear. Though it should be noted that there is accumulated evidence that “process” skills such as collaboration in therapy, therapist empathy, working alliance, and facilitative interpersonal skills matter (Wampold & Imel, 2015). In the past, researchers often examined the contributions of different techniques and theoretical orientations to clinical effectiveness, but recently common factors across all forms of therapy, such as therapeutic relationship, hope and expectancy, and agreement/collaboration on goals have been shown to contribute a great deal to outcomes. There is also growing recognition that variation between therapists account for a major difference in outcome. The implication of this identified difference between top- and bottom-performing therapists is that psychotherapy is a domain where practitioner expertise exists and that this expertise translates into benefit for clients (Tracey et al., 2014).

Despite researchers’ and clinicians’ best efforts, little progress has been made on evolving clinical practice in a way that translates into better outcomes. This is a major concern because despite its lauded effects, psychotherapy does not achieve significant outcomes for 40-60% of clients (Lampropoulos, 2011), psychotherapy is underutilized especially by vulnerable

populations, and many in the public cite a lack of confidence in psychotherapy as a barrier to access (Harris Poll, 2004; Penn, Schoen, & Berland Associates, 2004). In recent years, two avenues of research have sought to address this deficiency: ROM and deliberate practice.

ROM refers to the practice of routinely assessing and tracking client progress using formal standardized instruments. This information is then provided to clinicians and/or clients as ongoing feedback during treatment with the intention of improving treatment outcome (Lambert et al., 2001; 2018). ROM was initially conceived for two primary purposes. First, clinical trials of psychotherapy, while providing helpful information for what might work in the aggregate, contribute little guidance to help clinicians with the individual client in front of them. Therefore, theorists proposed that clinicians gather *in-vivo* data during treatment to respond to their client's needs in order to conduct research that is relevant at the individual level. This is the theory of patient-focused research (PFR; Howard et al., 1996). Second, although clinical investigations of psychotherapy showed that it was generally quite effective (Smith et al., 1980), there remained a minority of clients, around 5-10%, that exhibited a pattern of deterioration over the course of treatment (Lambert, 2013). ROM was devised as a way to help clinicians keep track of client's progress, identify at-risk clients, and make appropriate adjustments to the treatment approach. However, qualitative studies of ROM reveal functionality beyond gathering data on outcomes and minimizing risk of deterioration. These studies show how ROM can be used to facilitate clinical conversations and client-clinician collaboration (Esmiol-Wilson et al., 2017; Sundet 2012; 2014). Additionally, obtaining and discussing client feedback has been conceptualized as a therapeutic intervention in itself, which can also apply to ROM activities (Finn, 2007).

There are now numerous standardized instruments used for the purposes of ROM (Drapeau, 2012), but the most well researched monitoring tools used for ROM are the Outcome

Questionnaire 45.2 (OQ-45), and the Outcome Rating Scale (ORS) and Session Rating Scale (SRS). These tools were investigated using randomized clinical trials (RCTs) comparing intervention groups where clients' therapists received ongoing feedback on their client's progress with control groups where no feedback to therapists was given. Initial RCTs of the OQ-45 showed considerable promise: Lambert et al.'s RCT (2001) found that feedback was associated with improved client outcomes but only for the subset of clients categorized as "Not-on-track (NOT)." NOT clients are those who exhibited trends towards deteriorating over the course of therapy based on their progress pattern in therapy. For these NOT clients, the researchers found that the ROM intervention group had a moderate effect compared to a control condition. Lambert et al. (2002) replicated the above study with a larger sample and found a similar moderate effect for feedback with NOT clients. Since then, numerous RCTs have been conducted on the use of ROM with different tools, different clinical settings, and even different countries. Meta-analytic studies of these trials provide strong evidence that ROM leads to improved client outcomes (Lambert et al., 2018). However, questions remain about implementing ROM into existing systems, knowing how clinicians utilize ROM feedback information, and understanding the contribution of ROM to clinician development (Wampold, 2015). This is where ROM is being connected with therapist skill development.

Researchers studying the development of expertise and mastery across different fields and professions have found that expertise is a function of a prolonged cycle of feedback and practice rather than innate ability or talent (Ericsson et al., 1993). This cycle is captured under the term deliberate practice. Deliberate practice is defined as individualized training activities specially designed to improve an individual's performance through repetition and refinement (Ericsson, 2018). Ericsson et al. (1993) found that top performers and experts in several fields reported

significantly greater amounts of deliberate practice activities over the course of their development compared to amateur performers. In applying the concept of deliberate practice to the psychotherapy field, researchers suggest that deliberate practice activities include getting feedback on their performance by measuring outcomes, recording work and self-observing, getting direct feedback from supervisors or mentors on recorded work, and devising practice regimens to improve skills (Rousmaniere, 2018). Though the study of deliberate practice with psychotherapy is a relatively new topic, the few studies examining the association between therapist performance and deliberate practice activities have found a connection (Erekson et al., 2017; Goldberg, Babins-Wagner, Rousmaniere et al., 2016).

ROM plays a significant role in deliberate practice by helping therapists obtain objective outcome data to measure their performance (Wampold, 2015). This is integral because research has consistently shown that therapists are poor judges of their own performance, and in particular, in identifying clients that are at-risk of an adverse, deterioration outcome. Hannan et al. (2005) found that compared to actuarial methods, therapists performed far worse in predicting which of their clients would deteriorate. Additionally, Walfish et al. (2012) found that therapists frequently underestimated their rates of deteriorating, overestimated their rates of success, and exhibited evidence of self-assessment overestimation bias. As such, researchers have recommended therapists engage in ROM to capture clients at-risk of deteriorating with greater accuracy and calibrate their self-assessments (Miller et al., 2013; Tasca et al., 2019).

Despite the considerable clinical trial research on ROM, a major research gap remains – how do therapists translate feedback information from ROM into improved outcomes? This question is of the utmost importance, clinically speaking. Clinical trials of ROM provide feedback information to therapists, but rarely do they look at how therapists use that information,

nor are standardized changes or adjustments usually required in these studies. This is a commonly identified limitation in these trials (Amble et al., 2015; Wampold, 2015). However, this process question is an important one as there is evidence of therapist effects on the utility of ROM itself for improving clinical outcomes (de Jong et al., 2012; Lutz et al., 2015). For example, Simon et al. (2012) conducted an experimental RCT on the effect of ROM feedback using the OQ-45. The researchers found a significant effect of ROM use on clinical outcomes for NOT clients. However, when they did a post-hoc analysis examining clinical outcomes by therapist, half the therapists had significant improvement in the ROM condition ($d = 0.34$), while half the therapists showed no effect of ROM use.

Significance of the Study and Relevance to Counselling Psychology

In counselling psychology (CP), practitioners seek to enhance and promote growth and well-being, to help people remediate a variety of concerns across the lifespan, to bring a developmental and multicultural lens to their practice, and to integrate research and clinical perspectives (CPA, 2018). The unique values of CP as a profession are practicing from a developmental perspective, emphasizing people's assets and strengths, tendency towards brief interventions, respect for client's history and environmental context, consideration for the vocation and career development perspective, engaging a preventative ideology, and being leaders in multiculturalism and respect for cultural diversity in professional practice (Bedi et al., 2016; Gelso et al. 2014). These values and principles show that counselling psychologists identify psychotherapy as a key aspect of their professional activity (Beatch et al., 2009). Generally, people in CP identify as a psychologist, or more broadly as a clinical practitioner. The core roles of the profession include remediation, prevention, and education/growth development. These roles combined help clients resolve their issues and concerns, mitigate clients' anticipated

issues in the future, and promote clients' well being and growth (Beatch et al., 2009; Gelso et al., 2014).

The theory, conceptualization, and implementation of ROM align closely with the roles and values of CP. ROM is intended to improve practitioner's clinical outcomes so that clients can experience remediation more frequently and efficiently (Lambert et al., 2018), which ties in closely to CPs central role helping clients. The intended purpose of ROM is to alert clinicians to at-risk clients and to prevent deterioration during therapy (Lambert, 2013), which aligns with the preventative roles and values of CPs. The theoretical relationship between ROM as a vehicle for feedback and deliberate practice (Tracey et al., 2014) relates to the developmental perspective of CPs towards clients and to their own skills and abilities. Finally, CPs acknowledgment of the importance of context in understanding both clients and epistemology lends unique openness to qualitative approaches to research investigation. For these reasons, I argue that obtaining a deeper, qualitative understanding of ROM, its process, and how clinicians can use that process is of particular significance and relevance to the field of CP.

Study Purpose

The purpose of this study was to explore how clinicians utilize information from ROM and its perceived impact. The specific group of clinicians being investigated were those who are engaged in the process of therapist self-development and who regularly and consistently used feedback information from ROM. This study addresses long standing questions in the field around practitioners' process when using ROM. For this investigation I used a qualitative methodology with a multiple case study design to obtain a deeper, descriptive understanding of the ROM utilisation process. Data was collected through the use of semi-structured interviews. The research questions for this study were as follows:

1) How do clinicians, who are integrating use of ROM in their practice for the purposes of therapist development, use the client feedback data to change their practices?

2) For those clinicians, what are the impacts of using ROM from an expertise and development standpoint?

To ensure that the RQs are addressed, I endeavoured to have coherence between the study RQs, methodology, design, methods, analysis, and findings. As Creswell et al. (2007) note, a clear sense of coherence enhances the legitimacy of the study and conveys to the reader the quality and trustworthiness of the research. Others agree (cf. Williams & Morrow, 2009).

Choosing an appropriate research methodology was the first step to developing a coherent study. The three primary research methodologies – quantitative, qualitative, and mixed methods have philosophical assumptions and viewpoints that underlie how knowledge is conceived. Creswell (2013) outlines how differing ontological, epistemological, and axiological assumptions define these philosophies and the process by which a researcher chooses a philosophy. Ontology refers to how one views the nature of reality and how it is constructed. Epistemology refers to how knowledge is created and defined. Finally, axiology refers to the role of the individual's values and biases in research.

The ontological and epistemological leanings upon which this study is based lie within the realm of social constructivism, which proposes that human knowledge is constructed based upon deeply held beliefs, assumptions, and understandings. Knowledge is derived from social influences and is thus deeply influenced by the social, cultural, moral, ideological, and political systems that the researchers and participants are embedded in. Thus, from a constructivist viewpoint, knowledge is derived inductively and reflectively from an analytic process that proceeds directly from individuals' viewpoints. The researcher "forges" a unique perspective on

the topic of interest or central phenomenon through an interpretive process. As such, constructivist research often adopts a qualitative approach, which has characteristics such as researcher participation and self-awareness, inductive analysis, sensitivity to context, and broad lines of inquiry (Braun & Clarke, 2013; Creswell, 2013; Ponterotto, 2005). Social constructivism stands in contrast to positivist or post-positivist epistemologies, which emphasize an underlying foundational reality that “true” knowledge arises from. In positivism, the validity of knowledge derives from careful adherence to procedures designed to eliminate biases and barriers that obscure knowledge as it truly exists in the real world. Having a strong theoretical foundation for understanding the topic of interest, as well as having specific and focused RQs, is critical from a positivistic perspective. An experimental approach using the procedures of the scientific method to minimize bias is often deemed most appropriate for research (Creswell, 2013; Ponterotto, 2005).

The nature of the RQs in this study were descriptive. Following the tenets of the field of counselling psychology and my own philosophical leanings led me to choose a qualitative methodology. This enabled the study to capture detail and complexity, to adopt a holistic viewpoint that considers context, and to provide space for differing viewpoints and perspectives on the issue. This emphasis on process description with a significant theoretical foundation and a constructivist perspective makes a case study research design most appropriate for the study (Creswell et al., 2007; Merriam, 1998; Yin, 2014).

Case Study Research

Case study research is a methodology that explores a context-bound specific system (i.e., a case) through in-depth descriptive analysis, leading to a rich and evocative written case report to complete the study. A case can be a specific situation, organization, place, or person bound by

time and location. Case study research is optimally suited to study a process or phenomenon in great depth, often producing a detailed descriptive report, a context laden narrative, or a theory informed example (Creswell, 2013; Merriam, 1998; Yin, 2014). Notably, case study research is one of the most popular approaches to qualitative research in the field of counselling psychology (Creswell et al., 2007). Case studies can be grouped under two intentions: Investigations of intrinsic cases derived from the uniqueness and interesting nature of the case itself; and investigations of instrumental cases derived from a desire to illustrate a specific issue or concept (Stake, 1995). Case studies can also involve an in-depth study of a single case or investigation of multiple cases that are then cross-analyzed (Baxter & Jack, 2008; Yin, 2014).

The philosophical underpinnings of case study research can vary greatly. Merriam (1998) and Stake (1995) situate case study in the constructivist perspective where knowledge is constructed by individuals within their particular social world. In turn, when researchers attempt to describe the case and its context, they make interpretations or inferences colored by their own perspective. Merriam emphasizes that there are multiple ways to interpret reality and when conducting qualitative research, the key point of interest is how people make sense of their reality in a unique fashion. Yin (2014) places great emphasis on theoretical and conceptual coherence between the questions being asked and the methods of investigation. From Yin's perspective, a case study can test the validity of a theoretical conceptualization of an issue or phenomenon against rival hypotheses using empirical evidence (Yazan, 2015). According to Yin, case studies are best suited to answer "how" or "why" questions about a phenomenon in a situation where it cannot be separated from its real-world context. In other words, when controlling the context of a phenomenon for investigation would be disadvantageous or impossible.

Merriam (1998) recommends having pre-determined criteria to identify cases that are most fruitful for answering the RQs, and sampling from those identified. Case study data collection is extensive and often draws upon multiple sources to enhance the breadth and persuasiveness of the findings. The data collection process is interactive, holistic, and adaptive. New ideas or leads for data collection can emerge during the course of the study itself. In case study, purposive sampling is done to select cases that will be the most aligned with the research purpose. Ideally, the selections are richly informative subjects that directly and obviously align with the proposed RQs. Maximum variation is one strategy for approaching the sampling process. In this strategy, the cases selected cover a wide range of individual characteristics, settings, and contexts; this enhances the breadth of the study. As with all purposeful sampling the exact number of participants that will be needed is adjusted over the course of the study in response to necessity (Creswell, 2013; Merriam, 1998). Collected information can include interviews, direct observation, documents, archival records and/or artifacts. Case study analytic strategies also vary quite widely ranging from thematic analysis to constant comparative methods to program logic models (Merriam, 1998; Yin, 2014). Typically, a detailed description of the case is produced with themes to illustrate the complexities and over-arching conclusions of the research (Creswell, 2013).

Multiple Case Study Design

This study involved an in-depth multiple case study on the process of how clinicians use ROM to enhance their clinical outcomes and foster their development. I focused the investigation at the level of individual clinicians bounded within their natural context of clinical practice to illuminate clinicians' feedback processes. The ROM field has often taken a positivist research approach that aims to control and negate the context around the phenomenon of interest. A

qualitative, context-bound investigation of ROM addresses gaps in research about the process and practicality in how clinicians utilize ROM.

Multiple case studies were used in this research project to expand the theoretical breadth of the study. For example, by comparing and contrasting how ROM information is used across different levels of experience or training. Investigating multiple cases also strengthens the findings through data triangulation, such as when data from multiple cases supports a conclusion. Multiple cases can also provide explanatory depth if there is clear evidence of how variations in context can influence the utilization process (Merriam, 1998; Yin, 2014). These case studies are instrumental, in contrast to intrinsic case study that focuses on cases with unique or unusual characteristics, because the selected cases will be used to illustrate and exemplify the process under investigation.

Chapter 2. Literature Review

In this chapter, I provide an overview of the research on routine outcome monitoring (ROM) and related topics. First, I summarize the findings from various reviews and meta-analyses of clinical trials for ROM. Following that I comprehensively and chronologically catalogue these ROM trials. From there, I review research studies and papers on deliberate practice and the implementation of ROM. Lastly, I summarize research on the process of using ROM, identify gaps in the literature, and position my dissertation project within the field.

Reviews and Meta-Analyses

A total of 10 reviews and meta-analyses on the evidence base for ROM were identified in the literature (Carlier et al., 2012; Davidson et al., 2015; Duncan & Reese, 2015; Gondek et al., 2016; Kendrick et al., 2016; Knaup et al., 2009; Lambert & Shimokawa, 2011; Lambert et al., 2018; Ostergard et al., 2020; Shimokawa et al., 2010). The majority of these reviews and meta-analytic studies found evidence supporting the effectiveness of ROM and/or client feedback, with Davidson et al. and Kendrick et al. being exceptions. The earliest review is that of Knaup et al. (2009), who conducted a meta-analysis of 12 studies and found that for short-term clinical outcomes, feedback had a small effect size ($d = 0.10$). They found no significant effect for long-term outcomes. However, they noted that at the time the evidence base was still immature.

A series of meta-analyses have been conducted primarily focused on clinical trials using the OQ-45 or the ORS/SRS for ROM. The first meta-analysis of 6 clinical trials found that there was a significant intervention effect for ROM feedback to therapists for not-on-track (NOT) clients. The effect size was small to moderate ($r = 0.26$) and the intervention group had significantly greater likelihood of exhibiting reliable change ($OR = 2.6$) and less likelihood of showing deterioration ($OR = 0.5$) compared to no-intervention control. The effect was slightly

greater when the ROM was combined with clinical support tools (CSTs) that provided prompts and guidance on how to respond to feedback ($r = 0.33$). This study also included a meta-analysis of 3 clinical trials using the ORS/SRS, which found a small-moderate combined effect size for the ROM ($r = 0.23$). The odds for reliably significant change were significantly greater for intervention ($OR = 3.5$) and significantly decreased for deterioration ($OR = 0.5$). These two meta-analyses provided firm evidence supporting the use of ROM to improve clinical outcomes (Shimokawa et al., 2010; Lambert & Shimokawa, 2011).

Recently, controversies have arisen around the evidence for ROM. A Cochrane review of ROM for common mental health disorders concluded that there was insufficient evidence that the use of ROM improves clinical outcomes (Kendrick et al., 2016). This Cochrane meta-analysis included 12 studies, though notably it did not include two studies that used a historical data set as the control condition nor any study conducted with a severe mental illness population. Pooled comparison of intervention versus control conditions found no evidence of difference in outcomes ($SMD = -0.07$) or number of sessions utilized ($SMD = -0.02$). However, meta-analysis of the NOT sub-sample did indicate a small effect of ROM ($SMD = -0.22$). The evidence included in the Cochrane review was generally graded as low quality because of significant attrition and inadequate blinding of conditions to clinicians and clients.

Another recent systematic review conducted by Gondek et al. (2016) noted that 15 out of 27 studies comparing treatment outcomes on feedback intervention vs. control condition found significantly better outcomes in the feedback condition. The authors also observed that 8 out of 11 studies comparing NOT clients specifically on feedback vs. no-feedback conditions had significantly better outcomes for the feedback condition. They also reviewed studies that found participants in the feedback condition reported significantly greater satisfaction, motivation, self-

efficacy, insight, and involvement in care self-report ratings compared to no feedback. However, the authors also identified the limitations in study quality such as underpowered comparisons, high attrition, and lack of detail in clinical trial description.

In response to Kendrick et al. (2016), Lambert et al. (2018) updated their earlier meta-analysis of ROM using the OQ-45 and ORS/SRS. In this update, they included 15 studies with the OQ-45, of which 11 had a significant effect of intervention for NOT clients. The ROM with the OQ-45 had a small effect size ($SMD = 0.33$), significantly reduced likelihood of deterioration ($OR = 0.61$) and significantly increased likelihood of reliable improvement ($OR = 1.89$). Out of a total of 9 studies using the ORS/SRS, 6 found a significant effect of intervention across all clients. The ROM with the ORS/SRS had a moderate effect size ($SMD = 0.40$), no significant effect on deterioration rates ($OR = 0.97$) but a significantly increased likelihood of reliable improvement ($OR = 2.11$). This meta-analysis provided much stronger evidence in support of the ROM effect with many more studies than Lambert & Shimokawa (2011). The researchers concluded that the evidence supports the use of ROM in clinical practice to help therapists identify at-risk cases.

Finally, in the most recent meta-analytic study, Ostergard et al. (2020) examined both randomized and non-randomized clinical trials of the ORS/SRS. They identified 18 studies of which 8 found a significant effect of intervention. The authors noted that all 8 of the studies were in a counselling setting whereas the other 10 studies were set in psychiatric units. The meta-analysis found a small effect size ($g = 0.27$) with significant heterogeneity, but there was no significant effect on deteriorating rates or number of sessions attended. Based on these findings, the authors opined that the ORS/SRS might be better suited for counselling settings than

psychiatric ones. However, they acknowledged the limitation that non-random clinical trials were included.

In conclusion, the majority of systematic reviews and meta-analyses of ROM provide evidence that it improves clinical outcomes, often demonstrating a small to moderate effect size for the intervention. However, these reviews also note some key limitations across studies, such as potential researcher bias, the sole use of the monitoring instrument as the outcome measurement, lack of blinding, and lack of understanding on the process of how ROM works. A review and critique of individual clinical trial studies should shed some light on these reviews.

Clinical Trials

Individual Therapy Trials

Lambert et al. (2001) was the seminal study investigating the effect of ROM using the OQ-45 to specifically address the 5-10% of clients that deteriorate in psychotherapy. This was a quantitative, experimental, RCT design comparing outcomes of therapists that received routine OQ-45-based feedback versus a control group of treatment-as-usual (TAU). Data was collected in a university counselling centre. The sample consisted of 609 consecutively treated clients. The researchers focused on the NOT client sub-sample. The results with NOT clients showed a moderate effect size ($d = 0.44$). There was no effect of ROM for on-track (OT) clients. Additionally, NOT clients in the feedback condition attended significantly more sessions while OT clients in the feedback condition attended significantly fewer sessions compared to controls. Thus, the researchers concluded that the ROM helps at-risk clients obtain better outcomes, perhaps by increasing the number of sessions attended. However, there was no particular impact on OT clients, except that it may make therapy more efficient.

Lambert conducted a follow-up replication study on the OQ-45 (Lambert et al., 2002). In this replication, the researchers also sought to understand the association of timing of feedback delivery and outcome. This study was a quasi-experimental clinical trial that had four months where no feedback was given and then four months where feedback was provided. The sample consisted of 1020 clients treated at a university counselling centre. The results with NOT clients were consistent with the previous study, with a moderate effect size ($d = 0.40$), significantly greater frequency of clinically significant change, and significantly greater session attendance for the feedback condition. The study also found that the difference between conditions arose only when feedback was provided.

Whipple et al. (2003) continued to build on the evidence base for ROM. Their study was an experimental RCT that examined the impact of therapist feedback with clinical support tools CSTs. The CSTs provided information on the therapeutic alliance, client's social supports, and client's stage of change. A total of 981 consecutive university counselling centre clients were randomly assigned to feedback and control groups. A total of 147 NOT clients were identified, and 59 were randomly selected to receive additional CST information. The results showed that for NOT clients, those who received feedback and CSTs improved significantly more than those who only received feedback with a moderate effect size ($d = 0.70$), who in turn improved more than those who received neither with a small effect size ($d = 0.28$). NOT clients in the feedback + CST and feedback conditions also had significantly less likelihood of deteriorating and greater likelihood of exhibiting clinical significant change; and they attended significantly more sessions. There were no differences across conditions for OT clients. The authors conclude that employing CSTs alongside feedback further enhances clinical outcomes.

Hawkins et al. (2004) examined the impact of giving feedback information to clients alongside therapists. This experimental RCT assigned clients to treatment-as-usual (TAU), feedback only to therapist (FbT), or feedback to both therapist and client (FbB) groups. The results showed that both feedback conditions had improved clinical outcomes with a small-moderate effect size ($d = 0.31$). Clients in the FbB condition also showed better outcomes than those in the FbT condition also with a small-moderate effect size ($d = 0.33$). There were no differences in deterioration rates, rates of clinically significant change, or number of treatment sessions. The authors concluded that the study supports providing ROM feedback to both clients and therapists.

Harmon et al. (2007) conducted another study examining the benefits of using CSTs concurrently with ROM feedback to therapists. The clinical trial was conducted in a setting that had already integrated the OQ-45 system, as such the researchers decided to use archival data as the control comparison group. New clients were randomly assigned to Fb or Fb+CSTs intervention. The CSTs consisted of an alliance measure, a stages of change questionnaire, and a measure of perceived social support. The results showed that for OT and NOT clients, both Fb conditions had significantly better outcomes. Additionally, the Fb+CSTs condition had significantly better outcomes than the Fb condition with a small-moderate effect size ($d = 0.31$) as well as significantly greater likelihood of clinically significant change and decreased likelihood of deterioration. This study provided further support for the effect of ROM and CSTs but has the important limitation of using an archival control group.

Slade et al. (2008) conducted a similar clinical trial using an archival control group. New clients were randomized to either a feedback to both therapists and clients (FbB) or feedback to therapist only (FbT) condition. NOT clients were also randomized to CST or no-CST conditions.

The CSTs consisted of an alliance measure, motivation measure, social support measure, perfectionism inventory. The results showed that both feedback conditions had better outcomes compared to control but were not different from each other. The CST condition also had significantly more improvement than the no-CST condition as well as significantly greater likelihood of clinically significant change and reduced likelihood of deterioration. This study also supported the use of ROM feedback and CSTs, but again has the important limitation of using an archival control group.

Miller et al. (2006) conducted perhaps the first study investigating ROM using the ORS/SRS. This study was a quantitative, pre-post design using computerized questionnaires that compared client outcome before and after implementation of the ROM system. The setting was a large telephone based counselling organization and the sample consisted of 6424 clients. The researchers found that the effect size for counselling services at the organization doubled post-implementation (rising from $r=0.37$ to $r = 0.79$). They also found that across individual clients, SRS scores and the act of completing the SRS correlated positively with improved outcome. Thus, the researchers concluded that integrated ROM using the ORS/SRS was associated with improved outcome.

Reese et al. (2009) conducted a study on ROM using the ORS/SRS in both a university counselling centre and a graduate training clinic setting. They randomized a total of 74 clients at both settings to intervention or TAU conditions. They found that in both settings, clients in the feedback condition had significantly more improvement with moderate effect size ($d = 0.54$ and $d = 0.49$ respectively). Clients in the feedback condition at both settings were also more likely to show reliably significant change, however, there were no significant differences in number of

sessions. The authors concluded that the studies replicated previous findings on the impact of ROM with the ORS/SRS for both OT and NOT clients.

de Jong et al. (2014) sought to evaluate the effect of ROM feedback to therapists and clients in both short and long-term psychotherapy. In their experimental RCT, they randomly assigned 475 clients to three conditions: FbT, FbB, and TAU. ROM feedback was provided using the OQ-45. The authors found no significant difference in final outcomes between the three conditions. In terms of rate of change, they found that the FbT condition had a small effect on rate of change for both OT and NOT clients ($d = 0.24$) for long-term psychotherapy. For short-term they noted that for both FbT ($d = 0.91$) and FbB ($d = 1.28$) there was a large effect for NOT clients compared to TAU. Based on these findings, the authors concluded that the feedback intervention significantly improved the rate of change for both short-term and long-term psychotherapy, especially for NOT clients in the short-term, but it did not significantly improve final clinical outcomes.

Lutz et al. (2015) endeavoured to delve deeper into the ROM effect by examining how differences in attitude and treatment length influence the clinical outcome effect of ROM. A total of 349 clients were randomized to a TAU control condition and a continuous feedback intervention condition. ROM feedback consisted of a symptom inventory, a measure of interpersonal problems, a measure of therapeutic alliance, and disorder specific symptom inventories. Client and therapist attitudes towards ROM were also measured via a questionnaire. The results showed that feedback condition, therapist attitudes, and patient attitudes were all significant predictors of treatment outcome. More positive client and therapist attitudes towards feedback was also associated with greater feedback effect on treatment outcome. There was no significant association between feedback condition or attitudes on treatment length. This study

provided further support for the ROM feedback effect on clinical outcome as well as a potential moderating effect of client and therapist attitudes toward feedback.

McClintock et al. (2017) sought to examine the impact of providing ROM feedback based on common factors. A total of 79 university students reporting mild depression were randomized to common factors feedback or TAU condition. The intervention consisted of outcome monitoring of depression symptoms and well-being as well as process monitoring of client's expectancy, perceived empathy, therapeutic alliance, and satisfaction over the course of five sessions. The results showed that client outcomes did not differ significantly between the two conditions. However, there was a significant effect of intervention on alliance and perceived empathy ratings.

There have also been several trials reporting a null effect for ROM. Murphy et al. (2012) investigated the effect of ROM in a university counselling centre. A total of 110 clients were randomized to intervention or control condition; the intervention used computerized ORS graphs with expected trajectories. The authors found no significant differences in clinical outcomes, length of treatment, and likelihood of reliable change between the two conditions for both OT and NOT clients. The authors concluded that their trial found no effect of feedback and wondered if statistical power was lacking. Rise et al. (2012) investigated the impact of ROM on therapeutic alliance and client satisfaction with a RCT. They found a similar null result with no difference between intervention and control groups, though they noted their sample size was small ($n = 75$). Schöttke et al. (2019) found a similar null result in their experimental RCT of ROM. Their three conditions were intervention, ROM with no provision of feedback, and TAU with no ROM data collection at all. They found no significant differences between the groups.

These clinical trials comparing an intervention group using ROM with a non-feedback control group provide a seminal evidence base supporting the effectiveness of ROM in improving clinical outcomes. These trials also noticeably share a strong study design with randomization, control groups, large sample sizes with adequate power, use of psychometrically sound measures, consideration for clinically significant change, and calculation of effect sizes. In many of these trials however, a recurrent limitation is that how therapists used ROM was not investigated. This process by which therapists translate ROM feedback into changes to their clinical practice remains an important question that has not been fully answered.

Couples, Families, and Group Therapy Trials

Researchers have also extended the investigation of ROM to other settings and treatment modalities. Several studies have examined the use of ROM feedback in couple, family, and group therapy settings. Davies et al. (2008) conducted an experimental RCT using ROM in a group setting. A sample of 16 groups were randomized to intervention or control condition, with a total of 94 clients analyzed. In the intervention condition, both group leader and members received session-by-session feedback in graph format on perception of group environment and helpfulness of the group. The results showed no difference between groups on outcome, rate of change, cohesion, or insight. In fact, those clients in the intervention condition that perceived the group as most conflict-ridden performed worse than the control condition. The researchers were surprised to find that feedback had so little impact and theorized that the group format diffused the impact of the feedback.

Slone (2013) reported an experimental RCT on the effects of ROM for group psychotherapy in an unpublished dissertation study. A total of 10 closed groups were randomized to intervention or control condition; the intervention consisted of the ORS/SRS and the CCAPS.

The author found that the feedback condition had significantly improved clinical outcomes ($d = 0.35$), increased likelihood of clinically significant change, more sessions attended, and a lower drop-out rate. Thus, in this study ROM feedback improved the effectiveness of group therapy.

Schuman et al. (2015) investigated the effect of ROM for military members in group psychotherapy treatment for substance abuse. A total of 263 participants were randomized to intervention and control conditions. The study utilized electronic ROM software to automatically gather data and provide feedback information to clinicians. The ROM condition had better clinical outcomes compared to control ($d = 0.28$), with significantly reduced likelihood of premature termination, and significantly more sessions attended. There were no significant differences between the NOT subsamples. This study supported the effectiveness of ROM feedback in a group setting.

Anker et al. (2009) examined the impact of ROM in couples therapy using the ORS/SRS and a measure of marital functioning. Clients were randomized into intervention and TAU conditions and a hierarchical linear modelling (HLM) approach was used for analysis. The feedback condition was a significant positive predictor of outcome with a moderate effect size ($d = 0.5$) and was maintained at 6-month follow-up. The feedback condition was also found to have significantly greater numbers showing clinically significant change and lower numbers of deteriorating clients. They also found that the association between feedback and outcome varied substantially across therapists.

Reese et al. (2010) replicated the Anker et al. study with a sample of 92 couples therapy clients who were randomized to a ROM or TAU condition. Couples in the feedback condition scored 4.4 points higher than those in the TAU condition, which was significant. They also found that the feedback condition was tied to significantly faster linear improvement in outcome over

time as well as significantly greater likelihood of attaining clinically significant change. Thus, the authors conclude that ROM improved the effectiveness and efficiency of couples therapy.

Tilden et al. (2020) later investigated the use of ROM with couples and family work in a Norwegian study. Their experimental RCT randomized 328 adult clients and their children to intervention or control conditions. The Systemic Therapy Inventory of Change was used to provide feedback. Outcomes were measured using the OQ-45, Dyadic Adjustment Scale, BDI-II, BAI, SDQ, and a quality of life measure. No differences were evident between the two conditions across all outcomes. The researchers theorized that this unexpected result arose because of potential adherence issues and/or use of informal feedback gathering by therapists in the control condition.

These clinical trials with group therapy and couples therapy showed that the impact of ROM extends past merely individual therapy contexts. The majority of these trials found a small to moderate effect of ROM compared to controls. These trials also had significant strengths including randomized, controlled study design, large sample sizes, use of psychometrically sound instruments, and calculation of effect sizes. A recurrent limitation in these trials however, was also that the process by which therapists used ROM feedback was not investigated.

Inpatient, Psychiatric, and Severe Mental Illness Populations

Puschner et al. (2009) examined the effect of ROM in an inpatient psychiatric setting. Their experimental RCT had 294 clients randomized between a feedback intervention and control condition. They found that clients rated acceptability and adherence highly, but no effect of condition on client outcomes.

Simon et al. (2013) investigated the impact of ROM in an inpatient psychiatric eating disorder program. Their experimental RCT randomly assigned 133 clients to intervention or

TAU conditions, using the OQ-analyst and ASC to provide ROM feedback. They found a significant effect for the feedback condition over TAU with a small-moderate effect size ($d = 0.30$). The feedback condition also had significantly more clients achieving clinically significant change.

Probst et al. (2014) conducted a RCT on ROM and CST intervention for psychosomatic inpatients. A total of 252 patients were randomized to intervention and control conditions. The intervention used the OQ-Analyst as the ROM system. Outcomes were measured at five weekly time points during treatment. The researchers found no difference between treatment conditions at four out of five time points, with only a small effect ($g = 0.12$) between week two and three.

Van Oenen et al. (2016) examined ROM in an emergency psychiatry setting with an RCT. The researchers randomized 287 clients to a ROM or TAU condition. The ROM condition used weekly feedback with ORS/SRS. Outcomes were measured using the BSI and the OQ-45. Surveys on therapist attitudes towards feedback and adherence were also administered. At 6-weeks the TAU condition had significantly better outcomes on symptom measures and rates of deterioration, but by 12-weeks there was no significant difference between the two conditions. Attitude and adherence surveys suggested that therapist's attitudes towards feedback were generally positive and the ORS/SRS was applied adequately in at least 70% of sessions.

de Jong et al. (2018) also examined the effects of ROM in an inpatient setting with a trial focused on the effects on clients diagnosed with personality disorders. Clients diagnosed with cluster B, C and NOS personality disorders ($n = 206$) were randomly assigned to a FbT, FbB, and TAU control conditions. ROM feedback was collected using the OQ-45. The results unexpectedly showed that for NOT clients, the FbB condition had a negative effect on clinical outcome compared to other two conditions. There were no significant differences in the rate of

clinically significant improvement or drop-out amongst the three conditions. Based on these findings, the authors concluded that ROM may be contraindicated for certain populations.

Errazuriz and Zilcha-Mano (2018) further investigated the effect of ROM with more severe populations. Specifically, they examined client, therapist, and process factors that may moderate the feedback effect. In their experimental RCT study, 547 clients were randomized to five conditions: TAU, weekly unprocessed ROM feedback from the OQ-30, weekly unprocessed alliance feedback using the WAI, combined unprocessed ROM feedback from OQ-30 and WAI, and weekly OQ automated progress reports. The results showed no significant intervention effect for OT clients on clinical outcomes, alliance ratings, or attendance. However, NOT clients showed worse outcomes in the ROM condition compared to TAU.

Common strengths of these ROM inpatient/psychiatric clinical trials are the use of experimental RCT study design, large sample sizes, the use of psychometrically sound ROM tools with data on the expected trajectories for clients built-in, and use of multi-level modelling analytic approaches. A common limitation across these trials and the majority of ROM clinical trials in general was lack of adequate blinding to treatment condition. But contrary to expectations of many of these researchers, ROM was found to have no significant effect or even a detrimental effect on clinical outcomes with these more severely ill, psychiatric, and/or inpatient client populations. This raises further possibilities and questions about the impact of ROM on clinical practice depending on the clinical setting, the characteristics of clients, and style of clinical intervention. Specifically that the impact of ROM on clinical outcome is not universal and uniform but rather more nuanced and complex.

Community Settings

Bickman et al. (2011) investigated the impact of ROM in a youth community mental health setting. They conducted a multi-site experimental RCT with randomization by site. There were 340 clients across 28 sites randomized to an intervention or control group. The intervention was a ROM feedback system using the a 32-item self-report measure of symptoms. The authors analyzed how fast the clients improved in each condition and found that youths whose clinicians viewed the feedback reports improved significantly faster compared to TAU. However, the authors acknowledge an important limitation in that 21 out of 28 sites were lost due to attrition.

Cooper et al. (2013) similarly investigated the effect of ROM in a school mental health service for children (4-11 yrs). Their naturalistic study ($n = 288$ children) used the Children ORS and a brief behavioural screening inventory to provide ROM feedback, however, there was no control group. The researchers reported a large effect size ($d = 1.49$) with 89% showing clinically significant improvement and only 4% exhibiting deterioration. Thus, the researchers concluded that school counselling supported by feedback is associated with large reductions in reported distress, but acknowledged the limitation of not having a control group.

Crits-Christoph et al. (2012) conducted a quasi-experimental study examining the effect of feedback intervention in a community-based substance abuse program setting. They had an initial TAU phase ($n = 165$) followed by an intervention phase ($n = 139$). The intervention used a modified version of the OQ-45 with the ASC as the CST tool. They found that the feedback intervention improved clinical outcomes in terms of distress, and alcohol, and drug use.

Therapist Effects

Simon et al. (2012) was a notable study that examined the effect of ROM using the OQ-45 in a psychiatric setting. This experimental RCT study compared ROM feedback with CSTs

intervention condition versus a no-feedback control. ROM was provided using an electronic, automated version of the OQ-45. CSTs were provided using the Assessment for Signal Clients-40 (ASC) system. Clinical outcome was defined as the degree of symptom change as measured by the OQ-45. The researchers found that for NOT clients the feedback condition led to better outcomes with a small effect size ($d = 0.12$) with half the deterioration rate compared to the control condition. Interestingly, the researchers then conducted a post-hoc analysis of the intervention effect size for each individual therapist in the study. They found that for half the therapists the feedback condition had a significant effect ($d = 0.34$) and for the other half there was no noticeable difference. Based on these results, the authors concluded that there may be a therapist effect influencing the efficacy of the intervention.

de Jong et al. (2012) conducted an experimental RCT on ROM specifically looking at the role of feedback signals and therapist characteristics in mediating the feedback effect. A sample of 413 clients were randomized to ROM with the OQ-45 versus TAU control; outcome was measured using the OQ-45 as well. Post-hoc information was then collected from the therapists about their feedback usage. The researchers found an intervention effect but only for NOT clients. They also found that the clients of therapists who reported high self-efficacy about using feedback and higher commitment to using feedback exhibited a higher rate of change. Based on these findings, the researchers concluded that feedback intervention may have variable effectiveness depending on the therapist. A notable strength of this study was that researchers collected data on how therapists used the feedback information. Limitations included ROM feedback being provided every two sessions rather than after each session, a high drop-out rate, and lack of blinding.

In summary, this literature review identified over 40 clinical trials examining the effect of ROM on clinical outcomes. Early clinical trials of ROM provided strong evidence that the intervention enhances clinical outcome with a small-moderate effect, especially for NOT clients. Later trials showed that the effect of ROM is further enhanced when used in conjunction with CSTs. Although the majority of initial trials were set in a individual therapy, university counselling centre setting, researchers extended investigations to other settings and modalities including couples, families, and groups; in inpatient and psychiatric settings; and community settings. A number of clinical trials have found that with inpatient populations ROM interventions may actually have a negative effect such that it may be contraindicated in that setting.

Expertise, Deliberate Practice, and Therapist Development

Theory and research on expert performance has provided strong evidence that expertise is a product of accumulated practice and development rather than innate talent. Ericsson et al.'s classic (1993) investigation of expert musicians showed that the best violinists and pianists had significantly greater average practice time and more practice on their own using feedback. This led to the theory that adult elite performance is a function of accumulated deliberate practice – effortful practice based on feedback. Since their original seminal study, this theory of expertise has been applied successfully to many other fields, such as medicine (Ericsson, 2004).

In the field of psychotherapy, theoreticians have discussed the difficulties in identifying and developing expert performers. Tracey et al. (2014) opined that this difficulty is due to the absence of an agreed upon standard of expert performance, lack of available information on therapeutic process and clinical outcomes, and lack of clarity on how to use information to inform therapist development. Consistent with Ericsson's theory, experience itself has no

relation with skill in psychotherapy without concurrent deliberate practice focused on improving therapist abilities (Goldberg, Rousmaniere, Miller et al., 2016; Minami et al., 2008; Okiishi et al., 2003; Wampold & Brown, 2005). Thus, Tracey et al. recommend that therapists engage in a deliberate approach by obtaining systematic feedback on client progress.

Based on this theory of expertise development, Chow et al. (2015) conducted an experimental RCT to determine the role, if any, of deliberate practice in the development of superior performance among psychotherapists. Their procedure was as follows: assess outcomes for each therapist, assess the relationship between outcomes and time spent on deliberate practice, and if a relationship exists examine the specific nature of deliberate practice activities. The sample for their study was 69 United Kingdom therapists that served 4580 clients. Outcomes were measured using the CORE-OM, a ROM tool commonly used in the United Kingdom. Deliberate practice activities and time spent were assessed using a 32-item survey called Retrospective Analysis of Psychotherapists' Involvement in Deliberate Practice (RAPIDPractice). A multilevel modeling approach to analysis nesting clients within therapists and therapists within organizations was conducted. The researchers found that therapist effects accounted for 5.1% of the outcome variance. As such, they grouped therapists into four quartiles based upon their outcomes. Time spent on deliberate practice was significantly related to outcomes, though there was no correlation between any specific types of practice. For the top quartile of therapists, time spent on deliberate practice was almost three times greater than the other quartiles. Chow et al.'s study provides preliminary empirical evidence linking deliberate practice to therapist improvement and serves as a stepping stone for future inquiry.

Goldberg, Rousmaniere, Miller et al. (2016) investigated the link between therapist experience and improvement in client outcomes. In this quantitative, longitudinal, retrospective

study using archival data, the outcomes for 18 years of therapists and patients for a counseling centre were analyzed. The sample included 170 therapists and 6591 clients. Outcomes were measured using the OQ-45 and therapist experience was operationalized as the total amount of direct client contact hours and the number of clients seen. A multilevel modeling approach nesting client outcome effect sizes within therapists was used. Consistent with previous research, clients had improved outcomes across the sample with approximately half of them demonstrating reliably significant change. There was a significant negative effect of therapist experience on clinical effectiveness ($d = -0.12$ per year) after controlling for potential confounds such as baseline severity and amount of training, with 40% of the therapists showing some improvement with experience. Limitations of the study include archival data and heterogeneity of the sample.

In a follow-up to the above study, Goldberg, Babins-Wagner, Rousmaniere et al. (2016) sought to examine the impact of organizational adoption of ROM and deliberate practice to improve the overall effectiveness of the organization. This was a quantitative, longitudinal, pre-post study. The sample included 153 therapists (the majority were students or provisional psychologists) and 5128 clients. Client outcome was measured using the OQ-45. A Cohen's d effect size was calculated for each client and a multilevel modeling approach nesting clients within therapists was used. The researchers found that outcomes significantly improved over time at the client level. Within therapists there was a significant improvement effect over time as well ($b = 0.034$). Finally, there was a significant effect at the agency level ($b = 0.035$) indicating that the pre-post difference for clients improved by 0.035 standard deviations each year. The findings showed a small but statistically significant increase in agency effectiveness over time with a small therapist effect. The authors were unsure about exactly what aspects of deliberate

practice or feedback integration may have accounted for this improvement. The limitations of this study were the lack of a control group and limited data on therapist characteristics.

Erekson, Janis, Bailey, et al. (2017) examined the relationship between stages of training and client outcome in a quantitative, longitudinal study using retrospective, archival data. The sample consisted of 22 therapists with 4047 clients at a university counseling centre with data from 40271 sessions. Client outcomes were assessed using effect size calculations of pre-post OQ-45 scores. A multilevel modeling analysis approach was used nesting client outcome and rate of change within therapists. The results showed that in terms of total improvement in outcome, only 4 out of 22 therapists increased the effect size of their outcomes over the course of training. There was no significant overall relationship between stage of training and client outcome, though the model did suggest that there was a small worsening effect on clinical outcomes in later stages of training. There was also no significant effect of stage of training on rate of change. The authors concluded that similar to past studies, this study showed no connection between therapist experience and client outcome, which they attributed to difficulties in developing therapist expertise. The limitations of the study were the small sample of therapists, issues with missing data, possible variation in the amount of clinical experience before graduate training, and generalizability of findings.

As the above studies show, the best evidence we have is that the accumulation of clinical experience or graduate training has no demonstrable benefit on therapists' clinical effectiveness. There is some evidence that deliberate practice is associated with therapist expert performance. However, studies of deliberate practice have primarily been associated with feedback related to client outcomes rather than on therapeutic processes associated with outcomes. Also, studies on

deliberate practice in psychotherapy are preliminary and few in number. As such, the relationship between deliberate practice and therapy process warrants future study.

ROM Adoption and Implementation

Though ROM has been recommended as a best practice by researchers, experts, and psychology organizations (Lambert et al. 2018; Tasca et al. 2019), survey studies have shown that ROM adoption is quite limited. Many researchers have therefore explored clinicians' and clients' perceptions of ROM and perceived barriers to its implementation.

Hatfield and Ogles (2004) conducted a cross-sectional survey study investigating the utilization of ROM. They randomly sampled clinicians with a 43.7% response rate ($n = 874$ participants). Of those surveyed, only 37.1% reported using ROM measures, with the most frequently used instrument being the BDI-II. Respondents stated that they perceived ROM as helping to track client progress and determining when treatment plans need to be altered. However, they also cited barriers to use such as time pressures, requiring extra paperwork, and the perceptions that it is not helpful. The strengths of this study was good response rate and that the sample had representativeness in terms of having practitioners that work with adults and children, variety of theoretical orientations, and even gender split. Study limitations were use of a custom non-validated survey and most of the survey respondents held doctoral degrees, which means that the results may not be representative of non-doctoral level clinicians.

Ionita and Fitzpatrick (2014) conducted a similar survey with a sample of Canadian clinicians. Their survey had a response rate of 37.3% for a total of 1668 respondents. They found that only 12.1% of respondents reported using ROM measures in their practice and that 67.4% of respondents were unfamiliar with ROM altogether. The ORS/SRS was the most commonly reported measure, but other instruments such as the OQ-45, BASIS, DASS, WAI, SCL-90 and

BDI-II were also utilized. The strengths of this study were the large sample size and evidence of demographic representativeness.

More recently, Jensen-Doss et al. (2018) conducted a survey to update rates of ROM use, to examine attitudes towards ROM, and look for predictors of positive attitudes. Their survey of clinicians had a response rate of 42.0% for a total of 504 respondents. In terms of ROM use, the results showed that 61.5% of respondents did not use ROM consistently and only 5.2% used the measures every 1-2 sessions. The assessment of attitudes towards ROM suggested that clinicians generally have positive opinions about ROM but more neutral or ambivalent attitudes towards actually using ROM in their practice. There was also a strong predictive link between clinician attitudes and ROM use. Clinicians who worked in settings that mandated ROM use were more likely to use ROM while those in private practice were less likely to use. The strengths of this study were a response rate comparable to previous survey studies on ROM use, a large sample size, and a rigorous measure development process.

Overall, these survey studies find that, despite the empirical evidence in support of ROM, only a small minority of clinicians use it. Additionally, a majority of clinicians are not even familiar with ROM. This suggests that the question of ROM implementation is an important one, and researchers have sought to address it.

Lucock et al. (2015) conducted a mixed methods investigation of barriers and facilitators of ROM implementation. They had seven data sources in their study: ROM scores from 202 therapy sessions, a therapist questionnaire about how they used feedback ($n = 42$), a therapist questionnaire on therapists' overall experience, information from review meetings, a post-discharge questionnaire on client experience, patient focus groups, and comparison to benchmark data. ROM was done using the CORE-10 and CORE-SF as well as CSTs for NOT clients. For

each client, signaling on their progress was given at session five. Clinicians had access to ROM feedback throughout the study at their own convenience. The quantitative results found that clients outcomes were not significantly different from historical benchmark data. In terms of therapist perceptions, 47% of respondents reported regularly accessing the feedback graphs and 60% reported that they would like to continue using it, while only 20% agreed that feedback helped them identify something new. Around 70% of respondents reported some action or reformulation based on feedback. However, only 50% discussed the results with their clients. Qualitative analysis found that facilitators of ROM use were client acceptability, the extent that the therapist integrated feedback into their practice, and compatibility with their approach. The barriers of ROM were therapists' concern that ROM would interfere with the alliance and encroach on therapy time, support for use of ROM, IT problems, and organizational chaos.

Ionita et al. (2016) investigated barriers to ROM implementation in a qualitative study using consensual qualitative research (CQR). They interviewed 25 clinicians that have led ROM implementation efforts. There were three themes for barriers: technical concerns, such as difficulties administering measures; concern with negative response from clients, colleagues, or organizations; and therapists' personal barriers, such as a lack of knowledge about ROM or personal discomfort. There was also a theme of overcoming barriers, by ensuring that the approach fits for the client, increasing knowledge, and changing one's perspective. Based on their findings, Ionita et al. suggested having local champions, focusing on changing people's attitudes, educating people about the measures, and outreach to training programs as strategies to overcome barriers.

Persons et al. (2016) sought to develop a multi-faceted intervention to promote adoption of ROM and overcome implementation barriers. The intervention involved training sessions and an

online CST tool. Outcome data was gathered on clinicians' ($n = 22$) usage after the training with one year of follow-up. The results showed that CST usage was significantly greater immediately after completion of training but decreased over time, however, at the end of follow-up usage was still significantly greater than pre-training. Usage of any ROM tool after training was not increased but at one-year follow-up ROM use was significantly greater than pre-training. The researchers concluded that the training promoted use of their custom online tool but when support for using it ended, usage tapered and clinicians replaced it with other ROM tools.

In an unpublished dissertation, MacMurray (2017) conducted a qualitative investigation of ROM implementation in graduate programs in mental health using a narrative approach. The author interviewed program and training directors of graduate mental health professional programs about their experiences implementing ROM. Best practices for implementation included building a culture of feedback amongst faculty, choosing a ROM system that was easy to use, and using ROM data in a manner that minimizes performance anxiety for students. Obstacles for implementation included financial cost, extra work, and damage to the therapeutic relationship. Facilitating factors for implementation included referencing published research to justify ROM, mandating ROM during the implementation, seeking full integration of ROM with existing record systems, and viewing the implementation of ROM as an ethical issue. The strengths of the study were that it addressed a novel area in ROM implementation research. The author noted that the limitations of the study were difficulties with recruitment shrinking the scope of data collection, use of leading questions in the interviews, misinterpretation of interview questions, and limited discussion of researcher reflexivity.

Finally, a recent systematic review conducted by Mackrill and Sørensen (2019) of key factors and issues in ROM implementation included a total of 48 studies and identified 13 factors

that influenced ROM implementation. Under the management/leadership factor important pieces included endorsement from higher-up, necessary resources to support ROM, staff turnover, and financial challenges. Inter-organizational factors include having an organizational policy for ROM and setting up support and training between organizations. Top-down and bottom-up process factors include a voluntary phase of adoption before making it mandatory to avoid provoking resistance. ROM feedback culture is another factor, in that it is important to develop a feedback culture when implementing and feedback must not be used for rewards and punishments. With the implementation team factor, the researchers found that ROM should be implemented by a team that includes representatives of all stakeholders, and that even after implementation there should be a steering group present. They also found that coordinators and champions help with implementation, these are persons tasked with overseeing the implementation. These champions serve as role models for other adopters. Staff is also an important factor in that they need to see ROM as meaningful, as a priority for the organization, and may need support to receive negative feedback from clients. However, some staff may see ROM as incompatible with their approach. The supervision/consultation factor concerns supervisor training in ROM, incorporation into supervision, and role modeling for a culture of feedback. For the training factor, insufficient training on ROM can be a barrier. Both staff and management need training on ROM. Training on ROM needs to be individualized, staff need to learn how to talk to clients about their feedback in useful ways, and how to incorporate ROM into their routine practice. The measures factor encompasses that the measures need to be relevant to staff and clients, that there should be graphics and predictive analytics to identify clients at risk. The reports factor is about what data the ROM should provide, such as dashboard data for individuals and total outcomes for the organization. The language factor encompasses

generating a common language to talk about the ROM measures and scores with clients in a meaningful way. Lastly, client factors are about the time it takes for clients to complete the measures, how relevant they perceive it, and their computer literacy. The researchers suggest future research related to training programs for ROM, how ROM is used, and aggregate ROM data should be used.

Process of ROM

The literature review in this chapter has outlined a substantial evidence base investigating ROM from an efficacy standpoint. Meta-analyses of these many clinical trials have demonstrated this efficacy, especially for clients at risk of deterioration (Lambert et al. 2018). However, a lingering question in the field of ROM research is what exactly are the “active ingredients” and how clinicians actually use ROM feedback in practice. Despite the profusion of clinical trials of ROM, very few of these trials collect any information on how participant therapists actually use the feedback data to improve clinical outcomes (Lambert et al., 2001). Wampold (2015) outlines how after more than a decade of study, it is still unclear how clinicians use ROM to improve service quality and clinical outcome. An understanding of this underlying process is key to developing an overarching theory for ROM as well as training clinicians on how to use ROM effectively. In this next section, I will review both qualitative and quantitative investigations of the ROM process.

Sundet (2012) conducted a qualitative investigation of clinicians' perceptions of the ORS/SRS using CQR methodology. The author interviewed four clinicians from a family therapy service in Norway. Participants found the ROM measure feasible to use, stating that it was fun, satisfactory, and safe. However, there were some situations where it was more difficult to use the tool, such as with children and adolescents. Clinicians described how the ORS

provided opportunities to open up a conversation with clients about giving feedback, clinical progress, and feelings of safety in therapy. They also described multiple conversation types such as helping the client externalise, discussing routine and structure, facilitating the client's expression of meaning, conveying to the client a "not-knowing" position, and discussing the client's perspective on the therapeutic work. Overall, Sundet (2012) concluded that clinicians tended to see the ORS/SRS as helping them to collaborate with their clients.

Sundet (2014) conducted a follow-up qualitative study again using CQR. This study focused on clients' perceptions of the ORS/SRS in the context of an outpatient unit for child and adolescent mental health treatment. The author conducted semi-structured interviews with ten families for a total of 26 clients. Clients perceived the measures as feasible and useful. However, they also had concerns about the time demands, needing to learn the tools, difficult situations such as if the client has dyslexia, and being too difficult for children. They also made suggestions like adding a number line to the scale, making it clearer as to what each scale refers to, and adding space for comments. Clients described the ORS/SRS as helping them communicate with their clinician, focusing the sessions and structure therapy work, and helping deepen exploration. Based on these results, Sundet (2014) concluded that the ORS/SRS enriched clients' perception of the therapeutic process.

Unsworth et al. (2012) also examined clinician and client perspectives of ROM in a qualitative study. They conducted focus groups and interviews with nine clinicians and 10 clients that utilized the CORE-OM. The results were analyzed with a general inductive approach and major themes were identified. They found that clinicians were initially anxious and resistant to ROM due to a fear of being judged, a tendency to trust their own experience, and technological challenges. However, the clinicians described how ROM helped with the therapeutic relationship

by serving as a conversation enhancer, focusing sessions, assisting with triage, and facilitating a deeper dialogue. They also noted that CORE-OM scores were informative for supervision and that ongoing support for clinicians is necessary for implementation. Clients reported that the graphical feedback was helpful and raised their awareness. This study notably outlined an initial process of resistance that was overcome by clinicians' adaptation. Similarly to other studies, the utility of ROM as a conversation starter was identified.

Esmiol-Wilson et al. (2017) conducted a qualitative study focused on trainee clinicians' experiences learning and using ROM. This constructivist, grounded theory study included 26 marriage and family therapy graduate students in an early clinical practicum that used the ORS/SRS in every session. The results showed four overarching themes: challenges clinicians faced learning to ask for feedback, positive clinical changes, personal growth, and overall buy-in. In terms of challenges the clinicians faced, the participants reported feeling vulnerable eliciting client feedback. They also focused on learning how to help clients express negative feedback, to emotionally process the feedback given, to respond to the feedback, and the impact of privilege and marginalization on the feedback process. For positive clinical changes, the clinicians expressed that the measure helped them better match client needs, added direction to sessions, and improved the sense of collaboration and therapeutic alliance. Participants expressed personal growth in the areas of empathy and self-awareness through this learning process. Finally, in terms of overall buy-in, clinicians outlined the benefits they experienced in using the ORS/SRS.

Hovland et al. (2020) also investigated clinician and client experiences with ROM. This was a case study investigation of the implementation of an in-house ROM system named Norse Feedback. The authors conducted in-depth interviews and focus groups with 22 clinicians and 12 clients, and then analyzed the data iteratively with an inductive coding process. The results were

summarized under four main themes: client's use of feedback, client adaptation to feedback as a communication mode, client and clinician negotiating feedback to influence treatment, and client feedback as an interactive sense-making effort. In terms of client use of feedback, clients described how they appreciated being able to provide feedback. Clinicians outlined that the tools enhanced clients' self-understanding but that some clients were indifferent or passive with the forms. For client adaptation to feedback as a communication mode, clients reported that clinical feedback could be a trigger for new awareness but that there were struggles to fit their experiences to the available options on the form. With client and clinician negotiating feedback, clinicians liked how the tool empowered clients and thought it was helpful to emphasize an important issue. Clients expressed the tool's perceived utility. Lastly, for client feedback as an interactive sense-making effort, it was clear that there was no uniform procedure in how the feedback was presented or discussed. Clinicians found the tool to be intuitive, and noted when the feedback report was discrepant with their clinical observations. This study showed the potential complexities in describing the process of using ROM and how it can vary depending on both the clinician and client.

Finally, in an unpublished dissertation study, Martinson (2013) investigated the process of how therapists use ROM feedback during therapy. Specifically, what feedback is elicited, how that feedback is interpreted, and how that information is translated into change in therapy practice. This was a qualitative study, from a critical and phenomenological lens, using semi-structured interviews. The sample was five Norwegian therapists that were currently using ROM tools. The analytic procedure drew on the concepts of CQR, in that content analysis was first subdivided into major domains, then into core ideas, and finally cross-analysis between cases. The author found seven major themes related to general therapy: truly acknowledging the client,

having an equality based attitude, trusting the client, being flexible in treatment, willingness to negotiate treatment, and client collaboration. Participants described how the ROM tools facilitated listening to and acknowledging the clients, and the importance of how clients interpreted the feedback. The conclusion of the study was that therapists relate to ROM in three ways: using it with the client to engage them, interpreting feedback with clients to involve them, and implementing ROM systems to empower clients.

These qualitative investigations of the ROM process had several strengths. Researchers often utilized an established qualitative study design such as grounded theory, case study or CQR. They also used appropriate study methods such as extended semi-structured interviews, focus groups, and/or written reflections. The majority of studies included discussion of researcher reflexivity, which indicates that researchers reflected on their potential biases. Many studies also included procedures to enhance the quality of the analyses, such as external auditing, member checking, and having a research team. These studies also had some common limitations. Often these studies utilized a single data source; multiple sources would enable triangulation of the findings. The findings of these studies may not generalize to the ROM process in other settings or other ROM tools. These studies were also conducted primarily as part of a ROM implementation process or with student trainees. As such, the findings may not address what the process of a clinician seasoned in the use of ROM is like.

Solstad et al. (2019) conducted a systematic review of qualitative studies of client's experience with the use of ROM, specifically what is helpful or hindering about ROM. Their review identified and extracted 16 studies and an integrative synthesis of the findings was thematically analyzed. The authors summarized four main themes: suspicion towards service providers, flexibility and support to capture complexity, empowering patients, and developing

collaborative practice. With the suspicion theme, clients report questioning clinicians' motives for ROM, that it is unnecessary, bureaucratic paperwork. They also express concerns that ROM would damage the therapeutic relationship. With the complexity theme, clients were concerned that the measures used would not be able to fully capture the complexity of their experiences, specifically focusing too much on symptoms rather than functionalities. Clients also discussed how the ROM measures can be difficult to understand and some prefer to give face-to-face feedback. With the empowerment theme, clients expressed that they wanted to be informed about the purpose of ROM, they wanted to be involved in defining their own outcomes, and wanted to urge clinicians to be responsive to their needs. Lastly, with the collaborative practice theme, clients reported that ROM helped to focus and structure sessions, they felt more engaged in the treatment process, and it helped them express themselves better. Clients also stated that ROM can stimulate reflection and conversation between client and therapist.

Quantitative investigations seeking the "active ingredient" in ROM have also been conducted. Amble et al. (2016) conducted a secondary analysis investigating the role of the warning signal in the mechanism for ROM effectiveness using data from a ROM RCT using the OQ-Analyst system. The researchers used hierarchical linear modelling (HLM) to estimate the slope before and after the warning signal were given. The results showed that the slopes of change before and after the signal were not significantly different between the two conditions. This suggests that the warning signal did not affect progress in therapy. An important limitation in this study is that there was no monitoring of how clinicians responded to the warning signal. It is possible many clinicians either ignored the signal or did not respond adequately to change their practice in a significant fashion.

Mikael et al. (2016) sought to dismantle the mechanism behind the ORS/SRS with an experimental RCT study by implementing a dismantling design to examine the relative efficacy of each component of the ORS/SRS. A total of 94 clients were randomized to three conditions: using ORS and SRS, ORS only, or SRS only. Clinical outcomes were measured using the Behaviour Symptom Checklist-18 (BSI). The results showed no significant differences across conditions as measured by the BSI by the fifth session and no significant differences in the rate of change. The authors thus concluded that using either component of the ORS/SRS yielded equivalent outcomes to using both measures. A clear strength in this study was the RCT design and also the use of separate measures for ROM and clinical outcome.

Brattland et al. (2019) investigated the working alliance as a potential change mechanism underlying the ROM effect. They conducted a secondary mediation analysis of working alliance and outcome data from a previous RCT (Brattland et al. 2018). The results showed that working alliance scores increased more in the ROM intervention condition compared to TAU and that this increased score predicted less self-reported distress post-treatment. An estimated 23.5% of the ROM effect in the study was explained by working alliance. This data is consistent with the hypothesis that the alliance is the mechanism by which ROM works. This study had the strength of using separate measures for ROM and clinical outcome as well as a high reported adherence rate to administering ROM to clients (81%). Overall, these quantitative process studies are inconclusive at this point, although Brattland et al. (2019) did provide some support for the working alliance as part of the mechanism for how ROM works.

Methodological and Content “Gaps” in the Literature

The majority of ROM studies have been quantitative studies with a RCT study design. These designs are well suited to investigate the effect of ROM on clinical outcomes, but reveal

little about the process by which ROM generates a clinical effect. Though there has been some quantitative research seeking to dismantle the ROM process (Mikael et al., 2016) and examine potential mediators (Brattland et al., 2019), a thorough understanding of the ROM process remains a major “gap” in the literature related to ROM (Wampold, 2015).

Studies of complex process phenomenon may be better approached using a qualitative methodology (Creswell, 2007). Though there have been several qualitative studies of ROM process, these studies often focused on the client’s perspective and on their perceptions with using the tools (Solstad et al., 2019). These studies’ RQs frequently concentrated on the perceived benefits, drawbacks, and overall acceptability of ROM. As such, in terms of study design, inductive methods, CQR, and thematic presentation of findings were often utilized to best answer these RQs. Rarely have these qualitative investigations yielded detailed descriptive information on how the ROM process works. Thus, a qualitative understanding of how clinicians use the tools to change their practice and obtain the ROM effect remains a “gap” in the literature. The purpose of this dissertation research was therefore to address this gap in the ROM process research using a qualitative methodology and the specific qualitative approach of case study.

Two overarching research questions drove this dissertation study: (1) How do therapists integrate client-based Routine Outcome Monitoring (ROM) feedback in clinical practice? and (2) What are the perceived therapeutic and professional development benefits for therapists using ROM feedback?

Chapter 3. Method

Participants

There were a total of six cases, who were all registered psychologists in the province of Alberta. Four cases had obtained Master's degrees and two had obtained doctoral degrees. Three were men and three were women. Clinical experience ranged from 5.5 to 30 years with a mean of 11 years and a standard deviation of 9.51. Years of ROM experience ranged from 4 to 17 with a mean of 8 years and a standard deviation of 4.88.

Procedure

Inclusion criteria. The bounded system of a case study is intended to place manageable limits on the data collection and analysis, and to focus procedures to ensure that the RQs are addressed (Creswell, 2013; Merriam, 1998). For the proposed study, the boundaries for case selection were registered psychologists in Alberta that have utilized ROM in their practice for at least a year, and who have a commitment to formally measure their outcomes and improve their effectiveness. I chose registered psychologists rather than graduate-level trainees in this study to ensure that cases will have a stable and solidified process of using ROM. Trainees that use ROM in their practice are often mandated to do so as part of their training, which can lead to adherence issues (Ionita et al., 2015).

Recruitment. Each case was asked to refer other potential candidates for the research - a snowball sampling approach. I chose this sampling strategy because I expected the specificity of the criteria for case selection would make the population difficult to identify and access (Biernacki & Waldorf, 1981; Palinkas et al., 2015). The target sample size expectation was derived from an informal methodological review of case study research in counselling psychology, which identified an average of six selected cases across multiple case studies related

to psychotherapy in the field of counselling psychology (Bargenquast & Schweitzer, 2014; Boswell & Bugatti, 2016; Brinegar et al., 2006; Cook et al., 2009; Friedlander et al., 2008; Knox et al., 2008; Larsen & Stege, 2012; Quinn et al., 2012; Schnellbacher & Leijssen, 2009; Schweitzer et al., 2017). To select the first case, I drew on my own connections and those of my research supervisor to identify clinicians who would fit the criteria for selection, and invited them to participate. From that point on, each participant was asked to nominate two colleagues who could contribute further to the study. I then contacted those nominated colleagues. All recruitment communication between me and the participants was done via email. Each potential participant was sent an introductory message and information letter explaining the study. If they expressed interest, an informed consent process was then initiated and I would send them the consent form.

Interview. Once participants provided consent to participate, a 30-45 minute semi-structured interview was undertaken. All interviews were conducted either in-person or through teleconferencing. An interview guide was used (see Appendix D). This guide contained broad questions about the clinician's background and training with ROM, what sort of information they gather, how they integrate that information with their practice, how it affects their practice, and the benefits for clients. In case study research it is tradition for the researcher to remain open and flexible to different avenues of inquiry that may arise (Yin, 2014), as such during the interview I only kept a list of broad questions to be addressed with few specific probes. An email was sent out one week ahead of time to remind participants about the scheduled interview date and time.

Transcription. Semi-structured interviews were audio recorded and transcribed. During transcription, identifying information including names and references to specific organizations or

job positions were removed. Transcription was done using Express Dictation Software and verified once for accuracy by the author.

Confidentiality and Remuneration. Every care and precaution was taken to protect participants' identities and to maintain confidentiality. Pseudonyms were used, potentially identifying information was removed, and quotes were judiciously selected to show this consideration (Magolda & Weems, 2002). Participation in this study was voluntary and participants were free to withdraw at any point in the study without consequence. To acknowledge the time and energy contributed by participants and to facilitate recruitment, a \$25 gift card from Tim Hortons, Starbucks, Chapters, or iTunes was provided once participation was complete. This study was considered low-risk as participants were not at risk for physical or psychological harm.

Analysis and Interpretation

The purpose of the analysis was to develop a thorough understanding of the case from the data. The process of reaching this understanding was inductive, iterative, reflective, in line with considerations of context, and focused on meaning. The product of the analysis is an intensive, holistic description that corresponds with the data it was derived from (Merriam, 1998). A time series or logic model can also be a part of both the analytic process and the reporting of findings, in accordance with Yin's (2014) suggestion of a theoretically driven approach to analysis that emphasizes generation of rival hypotheses to guide an inductive and iterative process of exploring the data.

Though case study methodologists are in agreement that case study analysis should be open and inductive, the specific procedures however are less clearly prescribed. Therefore, for this study I borrowed from the procedural structure of thematic analysis in order to have more

clearly defined analytic steps (Braun & Clarke, 2013). The procedures for Braun and Clarke's approach are as follows: (a) gaining familiarity with the data and forming first impressions, (b) complete coding of all relevant aspects of the text, (c) formation of candidate themes based upon collated codes, (d) developing and writing theme definitions based on selected candidate themes.

In the first phase, there were three steps: (1) transcription of all audio-recorded interview data into textual format, (2) reading and re-reading textual data, and (3) recording initial analytic observations. In the first step the data from the semi-structured interviews was prepared for analysis by audio-recording each interview and transcribing verbatim into a textual Microsoft Word document. In the second step, I read and re-read the data to familiarize and immerse myself in the analytic process. Then in the next step, I recorded my first impressions, reactions, and tentative ideas in a series of brief memos that served as the starting point for the analysis (Yeh & Inman, 2007).

In the second phase, there were two steps: (4) coding and (5) collating. Coding can be defined as a process that "deconstructs" the data into units of meaning that facilitate the generation of broad themes or categories (Yeh & Inman, 2007). In this study, I approached coding from a data-derived perspective – that is focusing on the semantic content of the data; this is to ensure that the nature of the codes align closely to what the data encapsulates, which facilitates a descriptive approach to the analysis. Coding in this study was complete – that is each and every segment of the textual data that is relevant to the RQs was coded (Braun & Clarke, 2013). This thoroughness laid the foundation for an in-depth understanding of the cases. During the collating step, instances in the text where the same codes were applied are clustered together to facilitate explication of meaning in the next phase.

In the third phase there were three steps: (6) creation of candidate themes, (7) considering relationships between themes, and (8) reviewing and refining themes. In creating themes, I interpreted the clusters of codes generated from step 5 to form the initial drafts of themes emerging from the data. These candidate themes were defined as patterned responses or a meaning organized around a central concept that were targeted and relevant to the RQs. Generating candidate themes was an active process and reflected the creativity of the researcher. This process also reflected the underlying constructivist epistemology of this research study. In the next step, I considered how the themes are related to each other. These thematic relationships could be hierarchical. There could also be overarching themes, primary themes, and/or subthemes. These themes can be related through content or conceptualization (Braun & Clarke, 2013). Identifying these relationships was important for assembling a thorough understanding of the case from individual thematic concepts. Finally in step 8, I conducted an initial quality assurance check on the analysis by self-assessing the coherence between the candidate themes with both the codes and the raw data itself. To accomplish this step I related the themes generated back to the RQs. I also examined the effectiveness of the candidate themes in representing the data as a general whole.

In the final phase, there were three steps: (9) definition and writing of themes, (10) construction of the analysis, and (11) integration of literature/research. For step 9, I refined the themes through the process of writing, defining, and describing them. This process connected the over-arching themes both within and across cases to create the final case descriptions and case report. Construction of the analysis in step 10 involved considerations of how the analysis is presented, what quotations or narratives best illustrate the findings, and the notable elements of

the findings. Finally, in the last step, the themes from the study were linked to existing theory or research related to the RQs.

In qualitative research, the delineation between data collection and data analysis is often blurred (Braun & Clarke, 2013; Merriam, 1998). As such, the analytic process began as soon as the first interview was prepared and transcribed. I then worked on each step in the analysis concurrently for different cases as well as with the overall research project. In this way, the analytic process also informed later data collection, and the themes from one case were supported or refuted with data from other cases. Over the course of the research project, this iterative process through the steps of data analysis across the various cases refined the analysis and generated a rich, thorough descriptive understanding (Srivastava & Hopwood, 2009).

Quality Assurance

Considerations for study quality are an important aspect of any research project. A study with many of the features associated with quality indicates to the consumers of research that the findings from the investigation are accurate and reliable. However, methodologists have emphasized that the typical quantitative-positivistic criteria for judging research are often inappropriate for qualitative studies because of differences in philosophy and study design (Creswell, 2013; Williams & Morrow, 2009). Merriam (1998) redefines the traditional terms of research quality – reliability, internal validity, and external validity, from a qualitative case study perspective. Reliability refers to the consistency between the collected data and the inferences drawn from that data. Internal validity is about how well the findings of the study match the reality being investigated. Lastly, external validity considers the extent to which the findings of the study can be usefully applied to other situations.

In addressing internal validity, case study methodologists emphasize the importance of data triangulation – having multiple data sources, investigators, and/or methods to lend confirmatory support to emerging findings (Merriam, 1998; Stake, 1995; Yin, 2014). In the study, data triangulation was accomplished through multiple case studies and engagement of the research participants in collaborative participant-member checks. Discussing tentative interpretations and findings with participants provided another viewpoint to enhance the validity of conclusions drawn.

Internal validity was addressed by explicitly identifying my personal biases, assumptions, worldviews, and theoretical orientation prior to beginning the study. In qualitative research, one can argue whether the findings merely reflect the biases of the researcher instead of what is actually in the data. Researcher reflexivity was a key method for addressing concerns about bias in interpreting the data. The practice of researcher reflexivity involved being aware of one's biases, explicitly outlining those biases, and working with them during the research process (Braun & Clarke, 2013; Koch & Harrington, 1998). In this study, I exhibited researcher reflexivity by reflecting on and writing about my biases and assumptions with regards to the RQs, by maintaining an ongoing set of field notes on how those assumptions might have influenced the research process, and by organizing a clear audit trail on the analytic and interpretive decisions being made.

As mentioned above, reliability in qualitative studies considers the level of consistency between the analytic interpretations and the data collected. With a reliable qualitative case study, an external auditor would conclude that the results make sense given the data. For this study, a clear and coherent audit trail documenting my process connecting the data with the findings supported reliability.

External validity in qualitative studies reflects the ability to generalize the findings in a practical, personal, and natural sense; the consumers of the research are left to judge for themselves how it applies to their unique case or situation. To facilitate the reader's evaluation of the utility of the results in the proposed study, rich and "thick" descriptions that captured the diversity and depth of the cases were included (Merriam, 1998). An iterative and comprehensive writing process was utilized to facilitate this richness.

A final consideration for quality is the theoretical and practical impact of the study. According to Yin (2014), an exemplary case study must be theoretically significant. Thus, studies should be designed with consideration for its potential impact and scientific contribution. As the purpose of this research study was to address an acknowledged lingering question in the field of ROM, this research was considered meaningful and productive. This research will be disseminated through this doctoral dissertation, peer-reviewed journal publications, and peer-reviewed conference presentations. Target journals for this research include the *Journal of Counseling Psychology and Psychotherapy*. Target conferences for presentation include the Canadian Psychological Association annual convention and the Canadian Counselling and Psychotherapy Association annual convention.

Researcher Assumptions and Biases

As a researcher with my own unique background and experiences, it is undeniable that I have beliefs, assumptions, and biases that influence how I collect, analyze, and interpret data. To demonstrate researcher reflexivity and build a sense of trustworthiness into the research process I identified and recorded these preconceptions. To this end, I outlined my personal beliefs and assumptions about feedback, ROM, and therapist expertise openly here. This record facilitated my awareness and alerted me to how these biases could potentially influence my interpretations.

I first learned about ROM in my first year of graduate school. It was a mandated part of my initial clinical training. Naturally, I was curious as to the reasons behind this practice and stumbled upon the body of research that supports its effectiveness. As a budding young clinician, I of course had insecurities about my own competency and effectiveness, and so it seemed like a good fit to engage in this practice wholeheartedly. As a result I would say I have a significant bias in support of the practice of ROM because of firsthand experience with its potential benefits. Additionally, I likely also have a tendency towards downplaying the potential barriers and difficulties in implementing the practice because I made it part of my clinical approach from nearly the beginning of my training. Because this was my first lens for self-evaluating my own practice, the notion of obtaining feedback from clients both formally and informally has become nestled in what my conception of quality care is about. I noticed myself often asking supervisors about their thoughts on this practice and explore their willingness to help me integrate it into whatever practice setting I am working in. My past research experience with my Master's thesis and the Getting Better Research Group has immersed me in the theory and practice of collaborative/therapeutic assessment (C/TA), a person-centered approach to psychological assessment. Giving feedback to clients in a collaborative, personalized, and conversational manner is one of the core aspects of the C/TA approach (Finn & Tonsager, 1997). This experience biased me to think of the feedback process as collaborative, mutually constructed, and client-centered.

I also remember when I first came upon the research about therapist competence and expertise – how it both motivated and depressed me simultaneously. The notion that developing expertise as a therapist could mean dramatically better outcomes for my clients inspired me to devote time and energy to this cause (Chow et al., 2015). However, I also learned that therapists

are notoriously poor judges of their own outcomes (Hannan et al., 2005), that therapists generally do not improve their clinical outcomes with experience (Goldberg, Babins-Wagner, Rousmaniere et al., 2016), and that graduate training and education is not associated with improvement (Erekson et al., 2017). This body of research unsettled me greatly. Having the desire to improve and putting in the effort to learn about therapy provides no guarantees of actual growth; it is possible, nay even likely, that my efforts to date were all for naught. Naturally, this state of anxiety engenders a bias towards impulsive action, and a “more-is-needed” mentality, which makes me susceptible to more radical ideas for promoting clinician improvement, such as implementation of ROM. To me the link between improving therapist outcomes and integrating client feedback is a desperate and necessary first step in addressing a crisis. Thus, I have the expectation that clinicians driven to improve their practice are experiencing that same crisis. As a result, in this research I harbored expectations that these clinicians leaned on formal ROM tools to accurately assess their outcomes, engaged collaboratively with clients in discussing the data from formal measurements, and have fascinating and unique sensitivities to subtle variations in direct and indirect feedback from their clients.

Based on previous articles and commentaries, I also expected that clinicians will use client feedback as a conversation starter about how therapy is progressing with clients (Martinson, 2013; Moltu et al., 2018; Sundet, 2012). Personally, I have found it helpful to share with clients when I notice fluctuations in formal feedback results from session to session. It often sparks interesting discussions about what is working or not working in therapy or brings up a topic that was previously unmentioned. Formal feedback data can also be a signal to me that a change in approach or strategy is needed in therapy, which often leads to important dialogue with clients.

Finally, I believed that clinicians will also find ROM to be useful from a supervision or consultation standpoint. Tracking process and outcome across clients provides concrete data on a clinician's effectiveness and how it changes over time, which in turn helps to evaluate a trainees' progress. Feedback data can also show which clients are at risk for deterioration, which can prompt the clinician to seek consultation or supervision for those cases. Lastly, formal therapy process feedback can elucidate which skills and areas of knowledge that the clinician needs to develop. This would enable the clinician to develop a targeted deliberate practice regimen to address these areas of growth.

Chapter 4. Results

In this chapter, I present ten themes common across case studies, as well as describe unique practices for each case as they arise. The themes are: specific ROM tools, learning about ROM, ROM procedure, variations on ROM procedure, ROM interpretation, facilitating use of ROM, barriers to use of ROM, ROM impact on therapy, benefits of ROM to therapists, and improving how ROM is used. Finally, I present a rich and evocative description of ROM practices generated from the findings of this study to illustrate commonalities between cases and key practices of using ROM feedback.

Pseudonyms

I worked with six clinicians, or cases, in this study. To preserve anonymity, I gave them pseudonyms: “Twayla”, “Claude”, “Gary”, “Jane”, “Dimitri”, and “Elle.”

Specific ROM tools

The majority of participants use the ORS and SRS as their main ROM tool, either electronically or in paper format. Several participants also had experience using the OQ-45 regularly through the institution where they worked. Other ROM tools used include the CCAPS, various symptom screening tools like the BDI-II and the PCL-5, and a custom developed feedback tool. However, participants indicated a preference for the ORS and SRS (Jane: “*You get more out of it, like I prefer using the ORS than the CCAPS*”). Cost is a major reason for this preference (Dimitri: “*So in my private practice I use the ORS and SRS. I’d love to use the OQ, I just don’t necessarily want to pay for it*”).

Learning about ROM

Participants learned about ROM early in their careers, often during their supervised training. They were frequently trained by a supervisor or in the context of a training site

(Twayla: “*We actually got training in it right before we were able to see clients*”). However, some participants were self-taught. Participants described key topics about ROM that they were trained in including the components of the measures and their meaning, interpreting the measures, presenting the data to clients, and how to introduce and get buy-in from clients (Twayla: “*But the thing I found the most helpful in the training was with the Session Rating Scale, how to introduce that to clients*”). Participants also sought additional professional development related to ROM, such as conferences and consultations with experts. For example, Claude was inspired by reading the *Heroic Client* by Drs. Barry Duncan and Scott Miller to attend the Heart and Soul of Change conference. (Claude: “*So it would have been, I think the Heart and Soul of Change. We went to the conference and... I read the Heroic Client*”).

ROM Procedure

Structure of ROM procedure. Participants outlined the general manner by which ROM is integrated into their individual sessions and therapy overall. ROM information is gathered while checking-in at the beginning of the session or even before the session. Further feedback on the session is gathered and reflected on at the end of session through the use of an open question (Claude: “*At the end of session I’ll say... ‘it’s not judging me or you or an evaluation of us, but more how the session did or didn’t fit for you*”). This information is then entered into the client note for the session to maintain continuity of the data between sessions (Twayla: “*if [the SRS] is a low score I put it at the front of the session, like the notes for when I see the client the next session, just to check up on it*”). The participants describe knowing and using the standard instructions for scoring the ROM tools. Those that use the electronic versions of the ROM tool also describe using the sorting and organizing functions to keep track of their clients’ data.

Frequency of use. Participants all reported the use of ROM regularly and with all their clients, in particular administering the ORS every session (Twayla: *“So in my private practice I definitely try to incorporate it with every single client that I see and make it a consistent thing”*). The SRS is not collected as consistently. Other ROM tools, specifically the CCAPS are administered every three to five sessions. One participant said that they did not gather ROM information on the very first session.

Introducing the feedback tools. Participants emphasized the importance of how to introduce ROM to clients. Every participant outlined steps they took to establish a sense of safety for clients to give feedback. This is accomplished by inviting clients to give feedback, emphasizing individual preferences, reminding them to give feedback, making it optional, using humor, and showing appreciation for constructive feedback. One participant even made a point when the client is completing the ROM form to empower them and encourage disclosure. (Gary *“I really try to tell them right from session one, I want your feedback, I invite your feedback”*). Participants also introduce the tools by explicitly outlining the purpose and intention behind gathering this information, often emphasizing objectivity, keeping the therapist accountable, and having a warning system for deterioration. (Jane *“How I describe the ORS is I say I like to make sure that what we’re doing is working for you and part of how I do that is I want to get a full picture of where you are right now as a baseline. We’ll monitor it and see if it’s working, if it’s improving, and if therapy is helpful”*). Often times a metaphor will be a part of the explanation. (Claude: *“I’ll say something like: well you know that it’s not like when we go to the physician we can do a blood test or an X-ray to see if this is helping. So because we need the vital signs as to how we’re doing this, as to how it’s going... the way I understand it is through your feedback, so your feedback will be very important to me to make sure you’re getting what you need.”* Some

participants will even explain how to interpret the scores to the client. Lastly, especially for the SRS, participants will stress that they are not looking for perfect scores, that the tool is not a rating of the therapist as a person, and that they will not take it personally (Dimitri: *“my hope is not that you give me perfect scores, in fact I hope the opposite that you’re able to give me a score that we could have a conversation about if there is some areas for me to improve”*).

Observations on how clients complete the tools. Participants commented how they pay close attention to the process of how clients fill out the tools, such as associations between client’s response and their mood, or the extent to which they read and reflect on the questions (Elle: *“So it’s not to me just about the score but about the micro-levels, the individual answers, and more the macro-levels, how do they answer each question”*).

Prompting clients to elaborate on a feedback score. Every participant described how after the score is obtained they will invite clients to comment further on it. This involves checking if the score’s associated interpretation makes sense to the client, getting the client to elaborate on why they chose a specific number, and commenting on trends or comparisons with scores from previous sessions (Claude: *“Does that feel like number means something that is something much different now. And so then it can either be the intervention, it could be where we go, or it could just be a validating statement”*). In particular on the SRS, even slight decreases in scores from one session to the next are called to attention and discussed with the client. (Jane: *“I would even ask if it’s a ten, ok well obviously something really clicked or felt really good. Any idea what that was?”*). Also, if clients are observed to have filled it out rapidly, they may be challenged to reflect on the scores more.

Client engagement. Participants repeatedly described how the ROM tools and feedback can be used for client engagement. First, participants see the act of obtaining feedback as

including the client in shaping the nature of therapy. ROM is symbolic of an intention to bring an atmosphere of collaboration into the work. (Dimitri: “*It’s a chance for them to think back and think, ‘Hey what helped, what are some of the factors that have caused this [score] to go up or go down?’ and so it can help them to develop a bit of insight.*”) Second, prompting clients for the act of giving feedback is intended to have an empowering function that lessens the therapist’s role as expert and amplifies the client’s responsibility in their therapy. Third, the various aspects of the ROM scores and interpretations are seen as vehicles to start discussions with clients about the process of the therapy and topics that have been missed. (Twayla: “*I will bring it to the client... ‘I’ve noticed that things haven’t improved either for the better or for the worst in the last three sessions. And that’s an indication that maybe what we’re doing in therapy isn’t being effective enough or isn’t creating enough change.’ And so we’ll have a conversation around that.*”). Lastly, compiling the data over time allows the therapist to show the client their progress in graphical form.

Variations in ROM Procedure

Participants often stated that their procedure for ROM varied over time. In long-term therapy, the collection of ROM data can be done less regularly, such as every two to three sessions. In particular with the SRS, over a long course of therapy the collection of SRS feedback will be de-emphasized or ceased. (Twayla: “*What I’ll do is I’ll ask the client if they feel like they need to fill it out for the day and some of the ones I’ve had for longer periods of time they’ll be like, ‘No today was good.’*”). In both these scenarios the client is assumed to be able to communicate that feedback without the need for a formal tool. Instead, the therapist might inquire if they want to complete the SRS for that session or will have an informal conversation about the session process. (Gary: “*There’s some people who don’t use it at all. I just find I elicit*

that feedback verbally instead of through the iPad so I still get it in a way.”) Participants also discussed how they varied ROM procedure to accommodate clients, such as using the “faces” version of the tool with children and adolescents, reading aloud the questions and recording the answers, using a translated scale, or even changing the scales themselves. With clients that did not want to use formal tools, participants stated they would switch to informal, verbal methods utilizing general check-in questions. Participants also acknowledged contraindications for obtaining feedback, including physical barriers, severe personality issues, psychosis, inability to comprehend the measures, discomfort with the process, or choosing to opt out of giving feedback (Claude: *“if there’s just a ton of emotionality in the room or if I’m trying to establish an alliance and it’s not flowing... I just have to be respectful of where a person is”*).

ROM Interpretation

Using a cut-off score. Participants exhibited accurate and complete knowledge of the cut-off scores for their chosen ROM tool. They describe how cut-off scores are used to determine if the client is experiencing clinical levels of distress (Gary: *“So [the ORS] has the clinical cut-off of 25 out of 40, so there’s that guideline, which they have a blue colored zone [in the electronic graphical representation]”*).

Contextualized scores. Participants discussed the importance of examining the context behind each score in relation to what the client has mentioned about their experience, to clinical cut-offs and ranges, their previous scores, and the degree of change from previous sessions or baseline. (Claude: *“It needs to be contextualized... Well are they in the clinical range or are they out of the clinical range. Has the score significantly fallen or risen, are they maintaining. So that’s going to inform what we do and what we focus on.”*)

Between session scores. Participants framed scores in relation to the overall trends in data as part of their interpretation. They compared presently obtained scores with scores from the previous session and used this to engage their clients in a discussion about it. (Dimitri: *“I remember a recent client where she felt low still but I was able to show her... ‘You’re at an average of 6.5 to 7... but you started out at 2 or 3. So you’ve made progress.’ and when she was able to see that it was like, ‘Ok I’m on the right track.’”*) Participants were attentive to significant—as defined psychometrically for the ROM tool—changes in the scores between sessions, which would also prompt a conversation with the client as to the meaning behind it. They would also examine general patterns and trends over the entire course of therapy and use this information to guide their clinical decisions. (Gary: *“Showing them over time, what if there’s that improvement or if there isn’t that improvement that’s something we can talk about. It’s like, ‘Ok we’ve done six or seven sessions, the score isn’t really moving, what are we missing?’”*) Sometimes participants would produce a graph of scores over time to present to clients to show them progress. A few participants also reported comparing their ROM data to empirically-derived expected trajectory data in order to further enhance their ability to detect clients at risk of deterioration.

Discrepancies. Participants placed great emphasis on examining discrepancies between what they observe during sessions and what is reported by clients. Large discrepancies prompt them to inquire about client experience and facilitate a process conversation. It also enables the clinician to observe the correspondence between clients’ perceptions of their distress and how they express it. (Elle: *“To me a routine outcome measure is just another way of looking at their story, they have their verbal story and then they have their ROM story. And what you’re looking*

for is do these two match on a regular basis. And as long as they do then it has validity, if they don't then there is something that's gone on.”)

Whole numbers. One participant reflected on the tendency of clients to record whole numbers when the number line is present, rather than decimals. They thought the decimal figures captured more nuance (Dimitri: “[Clients] just circle the number and even when I invite them to slide off the full number they still gravitate towards the full number”).

Facilitating Use of ROM

Therapist buy-in. All participants commented on the importance of believing in ROM, believing in using it ubiquitously, and acknowledging its utility. One participant discussed how their background in sports established improving through feedback and they brought that sentiment to therapy and using ROM. (Claude: “I mean [feedback] works there [in sport], it's important there... when I coached I did the same, I got a lot of feedback for my players. So then I thought, well jeez we don't do anything like that.”)

Electronic feedback tools. Participants described the ease and intuitiveness of the electronic versions of ROM. They emphasized how quick it was for clients to complete, the security and confidentiality features, how it is helpful for data storage, and the automatic generation of graphs to show progress (Gary: “I hand [the iPad] over to them to fill out the four sliders [comprising the ORS] and they hit score and save and it charts immediately on the app, which is so nice.”).

Organizational adoption. Participants stated that organizations can also adopt ROM and integrate it into their general procedures. (Elle: “I joined the [organization] for my provisional hours and they used the Outcome Questionnaire 45.2 and the ten question Session Rating Scale for every individual, couple, or family counselling session.”)

Ease of use. Participants noted features of ROM tools that make it easy to use such as low demands for reading comprehension, low/free cost, and minimal disruption of therapy process (Claude: *“Finally finding [a feedback tool] that was feasible, not cumbersome, and that felt like it didn’t get in the way of the therapy process.”*).

Client acceptability. Participants observed that clients generally find using the ROM tools in their therapy to be acceptable. Clients, in particular university students, will show interest in seeing and discussing the progress graphs and their improvement over time. Participants comment that clients report openness and willingness to answer the ROM questions (Twayla: *“I would say anywhere between 85-90% of [clients] love it. They use it, they give feedback. Whenever I introduce it I’ve never had a client question the purpose behind it, I’ve never had a client say this is stupid or dumb”*). They may already be used to doing paperwork from previous clinicians or even physician visits. In general, participants estimate that only a small proportion of their clients have ever objected to using ROM. (Claude: *“I find there’s a very small, maybe less than 5%, group of clients who don’t want to do [ROM].”*)

Barriers to Using ROM

Therapist barriers. Participants cite the demands of ROM on their time and efficiency as a barrier. In particular, in private practice, they express that taking the few minutes for ROM uses up time in an expensive session. Lack of time at the end of session is a key reason given when participants do not administer the SRS. (Dimitri: *“I’ll be honest, there are times with the SRS that I just get to the end of the session, we’re running out of time and my time management wasn’t the greatest so I might not give once in awhile the SRS.”*) Participants commented that many therapists overestimate their effectiveness and surmise that these therapists do not seek feedback because it is personally challenging and anxiety provoking. (Twayla: *“It’s hard as a*

therapist to ask for feedback sometimes like, it's hard not to take it personally, especially when I was newer and learning). One participant described how when they supervised students, they had to ask a student to stop using ROM (Claude: "I had to have a student stop using it because they felt they were teaching to the test"). Another participant described how peers and colleagues have had misconceptions about ROM, such as that it has no value, that its purpose is for evaluating therapists' performance, and that clients do not care to do it (Twayla: "The response we often get is [ROM] just more paperwork. It's not going to bring value, it's just going to add more steps, it's going to take away from the counselling time, the clients wouldn't really like that"). Participants stated how difficult it is to foster buy-in from their peers and colleagues for ROM if they have had no previous training in using it. They expressed that the difficulty of integrating ROM into a therapists' existing work process as a barrier.

Organizational barriers. Participants reflected that when agencies they work at do not have a culture of feedback or advocate for the use of ROM then there is not much adoption. They also reflected that if an organization used ROM for performance review purposes it would be detrimental (Claude: "If [ROM] is used to decide... how you're performance reviewed or stuff like that then I think it's not good... cause then people teach to the test").

Problems with tools. Participants had criticisms about the design of the ROM tools: that the scales cannot capture many nuances in clients' lives, the burdens of administration for longer tools like the OQ-45, the accuracy and meaning of using a number line for ratings, and when the tool runs counter to user expectations. (Gary: "[For the interpersonal item] some people are like, 'Work, school, and friendships. Well work is doing terribly but friendships are really good, so what do I put?'... people would put two different scores.") One participant also outlined how the cost of many ROM tools and technological implementations of tools restrict which tool they

would consider using. Another participant commented on the challenges of working with software for a ROM tool that has been abandoned by the developer.

Client barriers. All participants commented on how clients misrepresent or restrict themselves in giving feedback. Participants muse that this barrier arises due to shyness, demand characteristics, the stress of the situation, and the difficulty of telling the “truth”. Examples of this issue include repeated perfect ratings on the SRS, and under- or over-reporting their distress levels. Participants wondered if client exaggeration of symptoms is stemming from a desire to justify continued service use. (Claude: *“I don’t want to say that clients lie to us, but clients probably withhold stuff. And then we know there’s all kinds of demand characteristics, that they want us to see them in a good light.”*) Participants also described other client misconceptions about ROM such as misinterpreting the phrasing of the tool or the tool’s purpose. Finally, some clients object to using ROM because of discomfort giving evaluations, making self-ratings, or not seeing its value. Other clients give feedback but in a clearly disengaged manner, such that they cannot explain the meaning behind their rating. (Elle: *“You do get the odd client who uses it to beat themselves up. Just kind of be harsh on themselves, ‘Oh, look at that, I’m not moving. I told you I couldn’t do it.’ I just look at it as an invitation to try and do something more creatively.”*)

ROM Impact on Therapy

Impact of feedback on treatment progress. Participants discussed how ROM feedback prompted them to change their treatment plan or approach. This might look like a shift in treatment to address what seems to be missing, a re-assessment of treatment goals with the client, a change in type or style of therapeutic interventions, or a more thorough case conceptualization. It could also lead the participant to explore transferring to another therapist or seeking

consultation. (Twayla: *“If I see that it’s staying at a high symptom distress after two or three stabilized sessions, then before going into the session I would really like to try to sit down and for me it indicates a good point to do a more thorough case conceptualization.”*) All participants note the utility of ROM feedback in helping to address lack of progress in therapy by helping both parties to keep track of progress and facilitating conversations about it. (Claude: *“I said, ‘That’s the other condition and I’ll take you back as long as you give me feedback,’ they said, ‘Ok.’ [The client] came back, the very first session it was like, ‘Yeah I come in, I tell you stuff, I get all sort of intensely dysregulated and then that’s it, then I’m waiting for the next session and I’m spinning.’ And so that was incredibly good feedback, so because basically he said you haven’t resourced me.”*) They also describe how ROM feedback helps them assess what is working and not working in therapy. Some participants state that using ROM serves to keep the client accountable to their own progress as well. Additionally, ROM seems to impact therapy by illuminating new directions or areas of focus or by helping with the efficiency of information gathering.

Impact of feedback on treatment process. Participants were unanimous that feedback helps them clarify goals, identify client needs, and focus in on the client’s priorities. (Elle: *“Whether or not they are highly clinically distressed or maybe doing ok but have one subscale of their life that isn’t working so well. And I can then start to use all that information to narrow in on what the client needs.”*) Participants also described how ROM feedback, especially the SRS, helps maintain the therapeutic alliance. Often this involves a decrease in SRS scores prompting a conversation with the client about comfort, feeling heard, and reactions to interventions. Participants also noted that ROM enhances the start of sessions by becoming part of the update process and serves as a check-in exercise in itself. They reflected that ROM feedback helps them

gather information on the client experience through facilitation of inquiries and conversations about the client's internal experience. In a way, gathering quantitative data serves to encourage the client's qualitative sharing. (Claude: "*This person said... 'After we decided to talk about what I wanted to talk about my eating disorder voice came in and said don't listen to him, it won't work'... [The client's] internal experience was nothing like [what I thought], which I would not have known about if I didn't give her that SRS*"). Participants highlight that obtaining ROM feedback encourages openness in clients by normalizing the process of giving feedback. Finally, participants outlined how information from ROM can play an important role in broaching the topic of termination. One might also give the client the progress graph and use that to facilitate a termination conversation.

Provides insight into patterns over the course of therapy. Participants described how the act of viewing and discussing the pattern of change over the course of therapy can foster insight for clients. By discussing the change in outcome scores between sessions, it provides an opportunity for clients to connect their life events with what they are reporting, to foster self-reflection, and to note patterns of behaviour. It also enables the therapist to demonstrate visually the client's progress over time (Twayla: "*I actually ended up seeing a... seasonal pattern with her stress in terms of where her highs and lows were... We were able to find two things... One, [the client] probably does have a bit of seasonal affective [disorder]... Two, that [their] stress also correlated with when [their] responsibilities at the volunteer position [they] had increased*").

Feedback as an intervention. Some participants conceptualized ROM feedback as a therapeutic tool. By observing the client's process in completing and discussing the responses, they learn about a client's characteristics, such as how assertive they are. The task itself can also

become a learning opportunity for the client to overcome their nervousness about giving feedback to others. (Elle: *“Are they consistent or are they all over the map? Are they able to put the time frames as we answer with the last week in mind? If they can do that, that’s actually a therapeutic tool. If you’re not overwhelmed by your whole life, you can just focus on one certain piece of time.”*)

Benefit of ROM to Therapists

Feedback informs clinical learning. Participants discussed the clinical lessons they derived from receiving ROM feedback. These lessons are varied and individual, but include adjusting the pace of work, learning what types of sessions work for people, letting clients guide the process, being more patient with clients’ process, and better awareness of what client’s need. They also mentioned how lessons they learned from one client’s feedback can translate to other clients, resulting in overall improvement in clinical skill. (Jane: *“I think that it’s made me a bit more patient with someone’s own process. Like someone can have pretty significant changes from week to week, another not. And I think it creates a bit more compassion and understanding in that way just to try and be really empathetic with where they are at.”*)

Address therapists’ personal goals. One participant outlined how they developed and evaluated personal goals for their clinical practice using ROM tools. This was done by examining the aggregate data for their client’s outcomes over time (Elle: *“[ROM] allows us to see our effectiveness ratio on an individual basis... Some of the personal goals I’ve had over the years is I wanted zero deterioration”*).

Awareness. Participants described how ROM feedback can alert them to when the session has gone awry, which can then prompt a dialogue on adjustments for therapy. Participants also noted that a small percentage of clients can deteriorate in therapy and so see the feedback as an

early warning system. The specific information gathered by ROM tools can also alert the clinicians to areas of risk like suicidal ideation and substance use. (Gary: *“I don’t see [ROM] as like a waste of time or anything because over time if [their score] does drop then they might have a lot to say, so that’s my motivation I think is just those little pieces you can catch.”*)

Enhanced objectivity. Participants expressed appreciation for having an objective and quantitative way of gathering data on their practice (Twayla: *“There’s importance in having an objective way to assess how clients are doing and an objective way to obtain more feedback”*).

Feedback helps with writing letters. Participants described how including the data from measures into their professional letters is perceived as adding weight and legitimacy (Twayla: *“If I have to ever write [clients] letters... it gives me a bit more street cred with other professionals and supports what I’m doing”*).

Adds to supervision. Some participants who supervised students stated that when students are getting ROM feedback it provides material for supervision such as discussing the process of getting feedback and highlighting which clients are challenging.

Improving How ROM is Used

Participants discussed their ideas on how they could improve their use of ROM. Professional development is seen as a way to improve ROM practices, either through training events, reading ROM related literature, or even consultation with experts on ROM. (Dimitri: *“It’d be nice if there was more training and other professional development around this topic.”*) Participants stated that they would like to use ROM tools even more consistently and comprehensively, providing a more thorough description of the tools to clients, striving to be more mindful and intentional with the tools, graphing and charting the data more consistently, and refining the language used when presenting and discussing the tools (Twayla: *“I have this*

intention I just haven't followed through on it yet, to print out the graphs and put it at the front of the chart and actually graph it each time.”). One participant is even interested in starting up groups to discuss their use of the ROM feedback tools (Dimitri: “I believe in... collaboration groups and so as a collaborative piece... having groups that are intentionally formed so that therapists can discuss their struggles or their use of these tools would be great”).

Rich and Evocative Description of ROM Use in Clinical Practice

The following is an evocative descriptive example of ROM in clinical practice based on the findings from the case studies. The ROM user begins by selecting a psychometrically sound measurement tool such as the ORS and SRS. They consistently use this tool with every client and on every session to gather feedback data. The clinician administers the outcome measurement at the beginning of each session and the process measure at the end of session. Afterwards, the clinician records the scores in the case note. Administration and scoring is completed using the standardized instructions for the formal measure.

The clinician introduces the ROM measure at the beginning of therapy by explaining the nature and purpose of the tool in-depth, perhaps by using a medical “vital signs” or similar metaphor. The clinician invites the client to give honest and direct feedback, reassuring their clients that they will not take feedback personally. While the client is filling out the tool, the clinician observes their process; noting how they filled it out for validity purposes. After scoring the tool, the clinician asks the client to elaborate on their scores. Overall, the clinician views using ROM as a way to enhance client engagement, to foster an atmosphere of collaboration, and to empower the client for a more equal relationship. The clinician also makes the collection of process data more informal for longer-term clients. Additionally, they will make accommodations for ROM data collection as needed like using a different version of the

measures for children or reading out the items. The client recognizes that collecting feedback will be contraindicated for some clients, such as those with active psychosis, severe personality disorders, or who opt out.

The clinician knows how to use the clinical cut-offs to interpret changes in the client's score. They also contextualize that interpretation by considering the client's recent experiences, previous scores, and baseline score. They use this information to engage clients in a discussion of their treatment progress. The clinician produces a graph of how the ROM scores change over time to add in the discussion. They may also, if the data is available, compare these scores with an expected trajectory to ascertain if the client's scores are indicative of risk for deterioration in therapy. The clinician is also alert to large discrepancies between the ROM scores and what clients report during the session and, if identified, highlights these discrepant observations to the client, which can lead to a discussion about the therapy process.

The clinician uses the feedback obtained from interpreting the ROM scores to assess the impact and effectiveness of treatment. The clinician notes trends in scores over time and forms a judgment on how well the current treatment plan is working. If there are indications that it is not working, i.e., stable or deteriorating ROM scores, then the clinician will re-evaluate the treatment plan and consider changing their approach, their interventions, or their case conceptualization. The clinician also uses the ROM feedback to identify the client's needs, priorities, and goals by highlighting the items and subscales that are rated as most distressing. The clinician notices decreases in scores on the process measures and will discuss these score shifts with the client to prevent ruptures in the therapeutic alliance. The clinician also draws connections between patterns in the ROM scores and the client's life. By sharing these patterns with the client, the client's insight into their own experience is fostered. The clinician seizes opportunities to use the

process of gathering ROM feedback as a therapeutic intervention in itself when appropriate.

Finally, when significant progress has been made the clinician shares the graph of ROM scores with the client and raises the topic of termination. The ROM clinician continuously reflects on how they could improve their use of ROM. They also seek out training opportunities and literature related to ROM for professional development.

Chapter 5. Discussion

This dissertation study aimed to address two main RQs: 1) How do clinicians, who are integrating ROM in their practice, use the client feedback data to change their practices? The key issues and words here are “use” and “change.” 2) What are the impacts of using ROM from an expertise and development standpoint for those clinicians? To answer these RQs, I conducted a multiple case study of six registered psychologists that use ROM regularly for at least a year and produced a detailed description of these practices for each case that was cross-analyzed thematically.

How Do Clinicians Use ROM-Related Client Feedback in Practice?

Participants utilized psychometrically sound ROM measures consistently with every client and every session. All cases reported using the ORS and SRS, though some cases used other measures in the past or concurrently with the ORS and SRS, such as the OQ-45 and the CCAPS. Following the standard instructions for the ORS and SRS, participants administered the outcome measure at the beginning and the alliance measure at the end of session. Participants administered and scored the ROM measures using standardized instructions. A common theme across cases was an in-depth discussion of how to introduce the ROM measures at the beginning of therapy. Participants emphasized the importance of explaining the nature and purpose of the tool, often using a metaphor likening ROM to the collection of "vital signs" at the physician's office. This process of introducing ROM to clients has not been prominently discussed in previous empirical research on ROM process. However, this is a practice recommended by the International Center for Clinical Excellence (ICCE) when implementing Feedback-Informed Treatment (FIT; Bargmann & Robinson, 2012). The ICCE put forth a series of manuals to guide clinicians on using and implementing FIT. In these manuals, the authors place great emphasis on

the method by which ROM is introduced to clients to create a safe atmosphere where clients feel they can give honest feedback. This is accomplished by outlining the ROM instrument and what it measures, explaining the purpose of ROM within the context of treatment, and summarizing how the feedback data from ROM can influence the course of treatment (Bargmann & Robinson, 2012).

Participants also recommend verbally encouraging clients to give honest feedback and to provide reassurance that it will not be taken personally. The ROM process literature touches on this concept of safety to give feedback. In Esmiol-Wilson et al.'s (2017) qualitative grounded theory study on trainee clinician's experience with learning FIT, the authors found that one of the main challenges for new clinicians was helping clients feel safe enough to give negative feedback. The study's participants expressed that clients may have feel safe and comfortable enough to be honest with clinicians. The ICCE manual also emphasized the importance of establishing a sense of safety for clients to provide feedback. The authors suggest reassuring clients that they will not be offended by negative feedback, conveying one's genuine desire to be responsive to the client, and that their commitment to using this tool reflects their accountability to the client (Bargmann & Robinson, 2012).

The participants in this study also suggested that clinicians should observe how the client completes the tool, paying particular attention to the client's attentiveness and effort. After the score is obtained, the participants tend to ask the client to elaborate on the score, i.e. explaining the meaning of the ratings. This finding is a novel one for ROM process research, which to date has not examined clinician's scoring process in depth. This process of elaboration on the feedback score aligns with procedures used with a collaborative/therapeutic approach to psychological assessment known as Collaborative/Therapeutic Assessment (C/TA; Finn et al.,

2012). In the C/TA approach, assessors observe clients carefully as they complete the assessment instruments and inquire about their experience with tasks. The assessor uses dialogue opportunities in between assessment tasks to gain a greater understanding of the client's behaviour. In C/TA, the purpose of this procedure is to engage the client actively in the psychological assessment and encourage them to be active collaborators in the process (Finn, 2007).

Participants discussed variations in their procedure depending on the situation, such as using a different version of the ORS specially designed for children and adolescents or having translations of the tool. They also recognized that ROM was not appropriate for some client populations like those with active psychosis, severe personality disorders, or those who objected or opted out of using ROM. This aligns with research that suggests ROM is not effective with severe mental illness populations (de Jong et al., 2018; Errazuriz & Zilcha-Mano, 2018; van Oenen et al., 2016). For example, in de Jong et al.'s RCT of ROM with personality disordered populations, the researchers hypothesized that providing feedback to both therapist and client would lead to superior clinical outcomes compared to controls, especially for NOT clients. But contrary to their expectations, they not only found that feedback had no apparent effect for OT clients, for NOT clients ROM had a negative effect compared to controls. Based on these findings, the researchers concluded that providing feedback may have a demoralizing effect for this clinical population and suggested that ROM with these clients may be contraindicated. Other clinical trials of ROM with severely disordered populations have found similar results (Errazuriz & Zilcha-Mano, 2018; van Oenen et al., 2016).

Participants saw client engagement as the major purpose of using ROM in their practices. They saw the process of obtaining client feedback as including the client in guiding the direction

and nature of therapy. In this way, they accomplish the goal of fostering a sense of collaboration between clinician and client. They also view the client feedback process as serving an empowering function for clients, which equalizes the therapeutic relationship and adds accountability for clients in therapy. This finding is in agreement with the findings of many other qualitative investigations of ROM process, that have also reported on the use of ROM in facilitating a collaborative relationship (Esmiol-Wilson et al., 2017; Hovland et al., 2020; Martinson, 2013; Solstad et al., 2019; Sundet, 2014).

This concept of client engagement and collaboration is an identified common factor associated with improved outcomes in psychotherapy (Wampold & Imel, 2015). Engagement and collaboration are recognized as key facets in the concept of the working alliance, specifically around the agreement of goals and tasks in therapy. This is important because there is strong evidence that working alliance is moderately associated with clinical outcomes (Horvath et al., 2011). For this reason, it has even been theorized that the effect of ROM in general is mediated by a better working alliance (Brattland et al., 2019). Engagement and collaboration are also theoretically tied to human motivation. Self-Determination Theory (SDT), for example, outlines that people have intrinsic and external sources of motivation. Intrinsic motivation stems from fundamental needs, the foremost being the needs for competence, autonomy, and relatedness. Satisfaction of these three basic needs is predictive of psychological well-being (Deci & Ryan, 2008). When applied to psychotherapy, SDT asserts that the central tasks of the psychotherapist are to support the client's autonomy by creating an atmosphere of active engagement and collaboration. This is accomplished by validating the client's perspectives, providing unconditional positive regard, supporting client choice, minimizing pressure, and providing a meaningful rationale. SDT proposes that this autonomy support serves to meet three fundamental

needs of intrinsic motivation, which in turn facilitates behavioural change (Ryan & Deci, 2008). Finally, in the theory of C/TA, client engagement has also been theorized to underlie the therapeutic effect of providing testing feedback during the psychological assessment (Finn et al., 2012). Researchers have discussed how emphasizing client engagement and collaboration in the psychological assessment process serves to magnify the therapeutic effect of this intervention (Finn, 2007). Finn (2007) also outlined that when the process of providing feedback is conducted in a humanistic and collaborative manner, the sharing of feedback can have an empathy magnifying effect for clinicians.

When it comes to interpreting ROM scores, participants noted the official clinical cut-off score and the degree of change needed for clinically/reliably significant change for their chosen measure as a starting point. Participants would then contextualize the scores by considering client's scores from previous sessions, as well as how they present in the current session. In particular, they were attentive to large discrepancies between their client's verbal report and ROM scores. Participants described that conversations about these discrepancies would in turn facilitate discussion of the therapeutic process. Finn (2007) suggests that these discrepancies reflect a gap between what the feedback data shows and the client's self-narrative. Self-verification theory posits that to bridge this gap, people have a need to maintain their current schemas or narratives about themselves, even to the detriment of their psychological well-being (Swann, 1997). The integration of in-vivo data, clinical observation, and context is another novel finding about the ROM process not previously discussed in the literature. But in contrast, qualitative investigations of ROM have oft reported on how ROM can be used to facilitate conversations about the clinical progress.

The utility of ROM as a facilitator or enhancer for conversations about therapy outcome and process has been well documented in previous ROM process studies (Esmiol-Wilson et al., 2017; Hovland et al., 2020; Martinson, 2013; Sundet, 2012; 2014). In their review of patients' experiences with ROM systems, Solstad et al. (2019) reported that a common theme across qualitative investigations was that ROM would stimulate conversations between therapist and client about the therapy, fostering collaboration and involving clients in decisions about therapy. These findings are also in line with recommendations for FIT. The ICCE manual conceptualized ROM tools like the ORS and SRS as dialogue tools that enabled clinicians to have open conversations with their clients about progress and therapeutic alliance (Bargmann & Robinson, 2012). The ICCE manual also described how clinicians can have "check-in" conversations when the data shows a lack of progress. This conversation involved exploration of the therapeutic alliance and possibilities for adjusting treatment. There were additionally "last-stop" conversations that were called for when the feedback data exhibited an extended lack of progress. This more serious conversation implored clinicians to explore the reasons for the lack of progress and to work out adjustments to treatment with the client to resuscitate the therapy process (Bargmann & Robinson, 2012).

How Does ROM-Related Client Feedback Affect, or Change, Clinicians' Practice?

Participants outlined various ways that ROM feedback affected, or changed, their therapy practice. One major impact was that ROM enabled both clinician and client to keep track of the client's progress. The clinician examined the trend in ROM scores over time, and if there were a concerning trend like a plateau or deterioration, this would serve as a 'warning signal' for changes to therapy. Research on ROM process has similarly found that therapists and clients engage in collaborative discussions about client's progress. Both Sundet (2012) and Unsworth et

al. (2012) found that ROM tools provided opportunities to discuss progress in therapy and that clients were interested in seeing scores and discussing this progress. The concept of a ‘warning signal’ is a key theoretical explanation for how ROM is purported to work. According to Boswell et al. (2015), ROM data can be used as an early warning system to clinicians for when treatment is ineffective. This can also provide more accurate detection of clients at-risk for deterioration compared to clinical judgment, which generally cannot predict these cases accurately (Hannan et al., 2005; Walfish et al., 2012). However, the latest quantitative investigation of the effect of the ROM ‘warning signal’ suggested that it did not have an effect on the clinical outcome (Amble et al., 2016).

Participants outlined multiple ways adjustments to therapy might occur in response to ROM feedback: modifications to the treatment plan, proposing a different treatment approach, using different interventions, or re-examining the case conceptualization. Finally, they also described how awareness of the client's progress can let both parties know when it is time to terminate therapy. These were novel findings not previously discussed in the ROM process literature. ROM theory typically makes the assumption that when clinicians become aware that treatment is ineffective, they will adapt accordingly on their own initiative. Thus, the clinical response to ROM was not explicitly documented previously (Howard et al., 1996; Tasca et al., 2009). Participants also reflected on how the act of obtaining feedback was an intervention in itself that can empower clients, teach them how to give feedback themselves, and foster assertiveness. This concept of feedback as a therapeutic intervention aligns closely with the practices of C/TA. Finn (2007) describes using the process of psychological testing itself to demonstrate the client's issues and to create the opportunity to explore these issues openly and directly.

Another way that ROM feedback influenced therapy is by helping the clinician ascertain the client's needs, priorities, and goals. While examining the scores on ROM subscales, participants were attentive to areas of the client's life that were rated as more distressed or for the endorsement of specific symptoms. Participants also emphasized the importance of significant decreases in scores on tools like the SRS, which measure the therapeutic process. Noticing and discussing these patterns was seen as helping to prevent ruptures in the therapeutic alliance. Both of these results are well supported in the literature. According to Unsworth et al. (2012), therapists identify ROM as helping the therapeutic relationship by deepening the dialogue with their clients, focusing the sessions through prioritization, and safeguarding against negative outcomes. Esmiol et al. (2017) reported that trainee clinicians found that ROM helped them better match client needs and improved the therapeutic alliance. These findings suggest that the process by which ROM impacts therapy is multifaceted. Previous quantitative investigations of the ROM process often focused on a single mediator. For example, Brattland et al. (2019) examined the working alliance as a potential change mechanism for ROM using a mediation analysis. They found data consistent with the theory that alliance is a mechanism through which ROM works, accounting for an estimated 23.5% of the variance due to ROM. However, another recent study on the effect of ROM on the alliance-outcome relationship found no evidence supporting ROM as a moderator (Sun et al., 2020). Other quantitative studies of ROM process have attempted to dismantle the process to find a sole key “ingredient” underlying the ROM effect such as the delivery of a warning signal when NOT clients are identified (Amble et al., 2016), but so far these dismantling studies have been inconclusive (Mikael et al., 2016). Future theory and research on the ROM process should consider that rather than a single key factor, it may be multiple interacting “ingredients” that underlie the impact of ROM. It should also

consider the hypothesis that not all therapeutic ingredients may even be present, like clients generating questions they would like answered by ROM, clinicians exploring clients' past hurts or negative experiences with ROM of other forms of "assessment" (Finn, 2007; Finn et al., 2012). Future research should examine these types of "ingredients" and empirically determine their effect on ROM processes and outcomes (Hanson, Zhou, Armstrong, & Liwski, under review).

Overall, in addressing the first RQ, participants described their procedures for obtaining ROM feedback and score interpretation. Across all cases, the participants contextualized these scores using information from previous sessions, trends and patterns, and the client's reported experience and meanings. Every case also clearly conveyed that the intention of using ROM moved beyond mere data gathering but as a way to facilitate deeper client engagement in therapy through empowerment, collaboration, and discussion. Finally, each participant described a multi-faceted impact of the ROM process on their clinical practice. This involved clarification of client's goals, enhancement of the therapeutic process, and warning signals when therapy was going awry.

How do Clinicians Use ROM from an Expertise and Development Perspective?

Participants described how they learned lessons because of ROM feedback they received. For example, that they needed to adjust the pace of therapy, to be more patient with clients, or to have better awareness of client's needs. Participants also used aggregated data from ROM tools to develop and evaluate their own personal goals for therapist development. Limited qualitative and quantitative research in this area has found evidence that adoption of ROM into clinical practice is associated with skill development in areas like empathy and self-awareness as well as improved clinical outcomes at the agency level (Brattland et al., 2016; Esmiol et al., 2017;

Goldberg, Babins-Wagner, Rousmaniere et al., 2016). Participants further outlined the benefits of ROM for clinicians. They expressed appreciation for how the tools provide objective, quantitative data on their clinical practice. Participants also liked to include scores from formal measures in professional letters because they saw it as adding legitimacy. Previous research on ROM process has also found that clinicians see it as feasible and acceptable in their practice (Delgadillo et al., 2017; Pascual-Leone & Andreescu, 2014; Sundet, 2012).

Finally, participants who had also supervised other clinicians described the advantages of having their students obtain ROM feedback for supervision purposes. It allowed supervisors to engage their students about the process of getting feedback and to highlight challenging clients. This aligned with research on the use of ROM in supervision, which showed that the intervention leads to better outcomes for clients and therapists (Pascual-Leone & Andreescu, 2014; Sparks et al., 2011). These studies also found that ROM in supervision was perceived as beneficial by giving supervisors accessible information on supervisees' progress with clients.

Aside from the RQs, participants also discussed the integration of ROM into their practice, specifically how they learned about it, the factors facilitating ROM adoption, and the barriers for implementing ROM. In terms of learning about ROM, participants most commonly learned about it during their early career training, often introduced to the practice by an early supervisor. Participants training and education on ROM included understanding the different components of the measures, how to interpret the scores, how to present the data to clients, and how to get buy-in from clients to incorporate ROM into therapy. Participants identified facilitating factors for implementing ROM such as the ease of using electronic feedback tools, their own buy-in into the concept of ROM, organizational policies that helped with adoption, and high client acceptability of the practice. Participants also noted several barriers to using ROM such as the time burden

and resource demands, how anxiety provoking it is to get feedback, having misconceptions about ROM, lack of buy-in at an organizational level, criticisms about the design of ROM tools, and client misrepresentation or disengagement.

Findings mentioned above are in line with previous research on implementation. In their systematic review of ROM implementation studies, Mackrill and Sørensen (2019) identified having a feedback culture, having organizational buy-in, and identifying enthusiastic early adopters as some of the key factors for successful implementation. Other qualitative studies have identified barriers to implementation, such as concerns about time burden and paperwork, financial costs, fit with clients, negative response from colleagues, and personal anxiety about getting feedback (Boswell et al., 2015; Ionita et al., 2016). Improving the ROM implementation process remains an area of further study.

Overall, the findings in this study align with previous research. Past ROM process studies have identified the utility of ROM in facilitating conversations about therapy, encouraging collaboration between therapist and client, improving the therapeutic relationship, and developing skills in empathy and self-awareness. However, there were also novel findings that spoke to details about how experienced clinicians use ROM: for example, using metaphors to introduce the nature and purpose of ROM, framing scores within the history and context of the client's treatment, using observation and dialogue to delve deeper into the meaning of client's feedback, and broaching the topic of termination.

In general, the theme of an interactive relationship was a recurrent stylistic choice that arose from participants' discussion of their ROM process. They sought to engage and empower their client through dialogue about the ROM tools, the scores, and the feedback provided. They also cited an enhanced therapeutic relationship and greater understanding of the client's

experience of therapy as key benefits from adopting ROM in their practice. These practices are quite similar to those employed by practitioners when implementing C/TA and SDT. With C/TA, practitioners seek to maximize the therapeutic impact of the psychological assessment by engaging the client in developing pre-assessment questions, interpreting the scores, and discussing the results (Finn, 2007). With SDT, practitioners seek to support a client's autonomy by fostering an atmosphere of equality and collaboration (Deci & Ryan, 2008; Ryan & Deci, 2008).

Limitations

Qualitative analysis is dependent on the researcher's interpretation of the data. As such a limitation of this study is that the findings are susceptible to my own biases. This potential bias could have been mitigated by employing a research team or second researcher to audit the analysis, but this was not done, which is another limitation. However, I attempted to enhance the trustworthiness of the results by discussing and acknowledging my personal biases ahead of time, member checking the results, and providing a rich, thorough description of the data. A major limitation in the study method was that concurrent data sources were not used to triangulate the results from the present analysis. This triangulation is a common strategy for enhancing the trustworthiness of the results in case studies. Participants' quantitative ROM data could have been used for triangulation. However, I decided to forego this requirement to facilitate study recruitment. Instead I focused on conducting member checks to ensure trustworthy findings. Another limitation is the sampling strategy used. The snowball sampling strategy used in this study may lead to important perspectives on the phenomenon of interest being missed because it does not guarantee that all important viewpoints on the topic will be

captured. However, I decided this to be a necessary limitation because of the difficulty in identifying potential participants that meet the criteria for the study.

Another limitation that arose in this sample was that every participant primarily used the same ROM measure, the ORS and SRS. Clinicians that regularly use a different ROM measure, like the CORE-OM, might have a different process than was captured in this study. Finally, as this was a qualitative study focused on specific cases, the generalizability of these findings to other cases and contexts is a limitation. The six selected cases were all bound to the context of registered psychologists in Alberta. Thus, the findings may not generalize to other contexts, such as psychologists in other regions or even non-psychologist clinicians. Given the importance of contextual information in qualitative research, the lack of detailed demographic information is also a limitation. Demographic information can frame the findings from individual cases and explain nuances between cases, but in this study this avenue of analysis was not available. Despite these limitations, the study has important implications for clinical practice.

Clinical Implications

The findings from this study speak directly to clinicians interested in integrating ROM into their practice effectively. ROM clinicians could aim to administer process and outcome measures every session, chart the scores, and record them in the case note. Where possible, clinicians could use an electronic ROM system to facilitate this consistency. Consistent administration and charting can alert the ROM clinician to patterns and trends in their work with clients. Clinicians could strive to foster a safe space for clients to give feedback by explaining the nature and purpose of ROM tools, encouraging clients to give honest feedback, and welcoming criticism. Clinicians could interpret ROM scores contextually, with consideration for the clinical cut-off, reliable/clinical change index, the client's previous scores, the client's baseline scores, and

observations on how they are presenting in the current session. Clinicians could also inquire about the client's subjective impressions and meaning that they ascribe to the score.

ROM clinicians could view the practice as primarily a tool to facilitate client engagement in therapy. Clinicians can realize that intention by sharing the scores and interpretation with clients and using that opportunity to engage clients in conversations about their progress. They could discuss trends and patterns they notice in the outcome scores with clients and discuss the possibility of changing the treatment approach when appropriate. ROM clinicians can also discuss changes in alliance scores between sessions and use that as an opportunity to engage clients in a conversation about the therapeutic process itself.

Finally, ROM clinicians can use aggregate outcome data across all their clients to pursue their own goals for therapist development. Trainee clinicians could use this data to identify and discuss challenging cases and shortcomings with their supervisors.

Future Directions for Research

This dissertation is at the heart of an exploratory study of a process that is not well understood, and as such future research is needed to confirm and elaborate on the current findings. A broader cross-sectional investigation of ROM clinicians' process is needed to replicate these results. This could be done with a clinician survey inquiring about ROM use and asking about the specific process in using these measures. Another important avenue of research is connecting specific ROM practices to improved efficacy in using ROM and better clinical outcome in general. Quantitative experimental studies with specific ROM practices as the independent variable and clinical outcomes as the dependent variable may help to answer such RQs. Alternatively, the overall ROM process could be investigated using a structural equation modeling approach. This would help to answer RQs about how specific ROM practices and

processes are related to one another. Exploring how to enhance the ROM process is also a key RQ for expanding the dissemination and impact of ROM. The theory and practice of C/TA is one perspective for this expansion. For example, by integrating the procedures of the assessment intervention session from C/TA into the ROM process (Finn, 2007). The theory of SDT is another well-supported theoretical perspective for enhancing the ROM process. One possibility could be experimenting with sources of external motivation in the implementation of ROM (Deci & Ryan, 2008).

The present study was limited in answering the second main RQ about the impact of using ROM on expertise development. Further research on how ROM is used to promote therapist development and how specific ROM practices it can support clinician engagement in deliberate practice is needed. Currently, no qualitative process research has been conducted on this topic. Future exploratory studies on the interaction between ROM, deliberate practice, and therapist development would be informative. A case study approach similar to the one used in this research project may be useful in that regard.

Conclusion

The specific process of how clinicians use ROM is an important lingering gap in the empirical understanding of ROM. In this study, I conducted multiple case studies of experienced ROM clinicians to better understand this process. The results showed that participants integrate ROM into their practice using standardized administration and scoring procedures. However, these clinicians then branch out by using ROM feedback for client engagement, by contextualizing the interpretation process for ROM scores, and by drawing on this information to guide decisions on therapeutic approach and process. Participants also used aggregated ROM data to set personal goals for their development and to identify gaps in their skills. Based on

these findings, clinicians interested in using ROM in their practice should go beyond standardized instructions and creatively view ROM as a tool to facilitate client engagement and clinical discussions with clients. Future research is needed to build on these findings with quantitative methodologies such as cross-sectional surveys of ROM process and experimental studies connecting specific ROM practices with clinical outcomes. In this way, we can move closer to declaring with confidence the best practices with this promising and powerful clinical tool. We can also practice more ethically.

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Appendix A. Recruitment Letter

You are invited to participate in a research study because you are a clinician that uses routine outcome monitoring (ROM) regularly in your practice. The purpose of this study is to describe how psychologists use information obtained from routine process-outcome monitoring to improve their practice and to describe the clinical impact of that information.

You will participate in a one-on-one interview lasting approximately 30 minutes. The interview will be recorded and transcribed. Your participation will hopefully contribute to a better understanding of how best to use ROM information. This may lead to improved clinical outcomes and clinical education for future practitioners. Your risk for participating in this study is minimal. As a thank you for your participation, a \$25.00 gift card will be provided for you after the interview is complete. You can choose gift cards from Tim Hortons, Starbucks, Chapters, or iTunes.

This study will be used in support of my dissertation research project.

Your participation in this study is voluntary and you may withdraw at any point. If interested, please contact me for more information. My contact information is below. Thank you.

Hansen Zhou
University of Alberta
Edmonton, AB
Hang4@ualberta.ca
780-868-6155

Appendix B. Letter of Initial Contact

Dear [Name],

My name is Hansen Zhou and I am a doctoral student at the University of Alberta. I am contacting you to kindly request your help with my thesis research project. [You were nominated by a colleague as a therapist experienced in using routine outcome monitoring to enhance clinical practice.] The purpose of the study is to examine how psychologists that regularly monitor their client process and outcomes utilize that information in improving their practice. Additionally, I want to understand how client feedback impacts and influences the course of psychotherapy. This study has been approved by the University of Alberta Research Ethics Board.

Thank for your consideration and interest in my study. Feel free to contact me with any questions or concerns at hang4@ualberta.ca or my supervisor, Dr. William Hanson at whanson@ualberta.ca

Sincerely,
Hansen Zhou

Appendix C. Information Letter and Consent Form

Study Title: Therapists Use of Routine Outcome Monitoring (ROM) in Clinical Practice:
A Qualitative Multiple Case Study

Research Investigator:
Hansen Zhou
University of Alberta
Edmonton, AB
Hang4@ualberta.ca
780-868-6155

Supervisor:
Dr. William Hanson
6-119C Education N
University of Alberta
Edmonton, AB, T6G 2R3
whanson@ualberta.ca
780-492-9007

Background

You are invited to participate in a research study because you are a clinician that uses routine outcome monitoring (ROM) regularly in your practice. Your contact information was solicited and obtained based on nomination from your colleagues. This study will be used in support of my dissertation research project.

Purpose

To describe how psychologists use information obtained from routine process-outcome monitoring to improve their practice and to describe the clinical impact of that information.

Study Procedures

You will participate in a one-on-one interview lasting approximately 30 minutes. The interview will be guided by a semi-structured interview protocol. It will also be audio-taped and transcribed with identifying information redacted. You will have an opportunity to review the transcription before it is analyzed. You will also be asked to review and comment on the analysis of your interview. Interviews will be conducted over the phone. Your participation in this study is voluntary and any data collected will be kept confidential and anonymous.

Benefits

You will not receive direct benefits from being in this study. We hope that your participation will contribute to a better understanding of how best to use ROM information. This may lead to improved clinical outcomes and clinical education for future practitioners. There are no anticipated costs for participating in the study. As a thank you for your participation, a \$25.00 gift card will be provided for you after the interview is complete. You can choose gift cards from Tim Hortons, Starbucks, Chapters, or iTunes.

Risk

There is minimal risk to participating in this study.

Voluntary Participation

You are under no obligation to participate in this study. Your participation is completely voluntary. Declining to participate will not affect any current personal or professional

relationships. You also have the option to skip any specific questions during data collection even if consent has already been given. At any point during the interview or afterwards, you can opt out of the study without penalty and can request that your data be withdrawn. If you withdraw from the study, your interview will not be included in the analysis, and all recordings or records from the interview will be removed. You have the option to opt out up to the point when you approve the transcription of your interview.

Confidentiality & Anonymity

Your data will be kept confidential and only the research team, including myself, my supervisor, and the auditor for the analysis will have access to the data. Data from this study is intended for use in my dissertation and any associated presentations and publications that arise from that. Participants will not be personally identified in any dissemination, and if direct quotes are used, every care will be taken to ensure that identifying information is removed from those quotes.

Electronic data will be stored on a password protected computer and the files themselves will be encrypted and password protected. Hardcopy documents will be stored in a locked cabinet. All data will be stored for a minimum of 5 years following the completion of the research project whereupon it will be deleted and/or confidentially shredded. You may request a copy of the research report upon the completion of the study by contacting the primary researcher.

Further Information

If you have further questions regarding this study, please do not hesitate to contact the primary researcher, Hansen Zhou, (780) 868-6155 or my supervisor, Dr. William Hanson, (780) 492-9007.

The plan for this study has been reviewed by a Research Ethics Board at the University of Alberta. If you have questions about your rights or how research should be conducted, you can call (780) 492-2615. This office is independent of the researchers."

Consent Statement

I have read this form and the research study has been explained to me. I have been given the opportunity to ask questions and my questions have been answered. If I have additional questions, I have been told whom to contact. I agree to participate in the research study described above and will receive a copy of this consent form. I will receive a copy of this consent form after I sign it.

Participant's Name (printed) and Signature

Date

Name (printed) and Signature of Person Obtaining Consent

Date

Appendix D. Interview Guide

Introduction: Thank you for taking the time to participate in this study. I would like to start by introducing myself: my name is Hansen and I am a doctoral student in counselling psychology at the University of Alberta. I am interested in learning about your process when working with routine process-outcome monitoring and how it contributes to improving your practice.

[Informed Consent process]

Demographics:

Age:

Gender:

Ethnicity:

Level of Education:

Years of Counseling Experience:

Extent of experience with ROM:

Interview

Participants' background with ROM

1. When and where did they first learn about it? What were they taught about it?
2. What are their motivations behind using ROM?

Participants' process utilizing ROM

3. How do they collect and interpret the information?
4. How do they use that information to improve their practice?
5. What do you learn about the client or the therapy from this information?
6. How does this process vary across clients, settings, histories, and contexts?
7. If applicable, how could this process be improved?

Impact of ROM for participants

8. What are the effects of utilizing ROM information? Benefits and downsides?
9. What have you learned from implementing ROM with regards to your own clinical practice or skills?
10. How have your clients reacted to your use of ROM? What impacts have you noticed with them?

End of Interview:

We have come to the end of the interview. I would like to thank you again for taking the time to speak with me. Do you have any questions now that we have finished?

[Remind participant about member checking]

To help me continue my investigation I am looking to identify other registered psychologists with experience using routine process-outcome monitoring to improve their clinical practice. I would like to ask you for up to two nominations of other clinicians you know that engage in this practice. I will then send them a contact email letting them know that they

have been nominated by a colleague for this study and providing them with the information letter. Would you like to nominate someone for this study now or at a later date?

[If now]: Thank you, could I get their name and contact information. Thanks again for participating in this study. I really appreciate your assistance and contribution.

[Otherwise]: Thanks again for participating in this study. I really appreciate your contribution!