The Role of Measurement Based Care in Clinical Supervision

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Abstract

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Measurement Based Care (MBC) is a method to systematically evaluate treatment as it progresses in real time, integrating standardized and idiographic measures relevant to treatment progress to inform clinical decision making (Fortney et al., 2017). There is a lack of training resources specifically geared toward teaching clinical supervisors how to use MBC during clinical supervision. This study investigates if an asynchronous, video-based training impacts attitudes towards and usage of and attitudes toward using MBC during supervision. Licensed mental health providers who reported currently being clinical supervisors were recruited to watch a training video demonstrating the use of MBC during clinical supervision. After watching the video participants were randomly assigned into two groups: one that received weekly email reminders of the benefits of MBC in supervision, and one that did not. Participants' attitudes towards MBC and its use in supervision were measured immediately pre- and post-training, and at one-month follow-up. The preliminary results indicate that watching the MBC training video significantly increased supervisors' self-reported attitudes toward MBC, perceived ability to teach the benefits of MBC, and self-reported likelihood of incorporating MBC during clinical supervision when compared to their baseline scores at Survey 1.

Introduction

Psychotherapy supervision is one of the key components of mental health professional training. Supervision helps supervisees develop general knowledge, skills and attitudes toward care and practices, and is a key component in developing a competent professional psychologist (Rodolfa et al., 2005; Watkins, 2020). It is through supervision during clinical training that supervisees learn how to apply their knowledge and skills to treat clients with mental health disorders (Balon, 2019). Because of this, supervisors hold much of the responsibility for ensuring that their supervisees not only become competent clinicians, but also learn to use the most effective evidence-based methods available to promote positive client outcomes (Weerasekera, 2019). The cube model of competency development outlines foundational, functional, and professional competencies which are crucial to the development of professional psychologists (Rodolfa et al., 2005). Supervision falls under functional competency, alongside other domains that describe the "knowledge, skills, and values necessary to perform the work of a psychologist" (Rodolfa et al., 2005 p. 351). Supervision is essential to the training of future psychologists, and a key component to professional competencies, yet evaluating the competency of supervision itself poses its own challenges.

A 2015 study replicated previous findings that supervisors have a significant impact on client outcomes, with more recent graduates (newer supervisors) having better outcomes than supervisors who had graduated less recently (Wrape et al., 2015). Wrape and colleagues hypothesized that an increased emphasis on supervision training seen in more recent graduates may be responsible for this difference. Despite being recognized for its importance, the act of supervision is not often taught as a skillset to be learned in its own right. Instead, a myth persists that having received supervision is enough to inform the ability to supervise others (Watkins,

2020). Falender and Shafranske critique this position explicitly, arguing that supervision competence is “dynamic and evolving” encompassing more than “countless repetition of professional procedures” and warn that “without commitment or requirement to courses of education and training, the current situation (with its deficits in preparation) will likely continue” (Falender & Shafranske, 2012 p. 132; Falender & Shafranske, 2017 p. 87).

The APA Guidelines for Clinical Supervision are an “aspirational” document designed to highlight important parts of the supervisory relationship and to suggest ways to maintain ethics and competency within supervision (*APA Guidelines for Clinical Supervision in Health Service Psychology*, 2014 p.1). A competency-based supervision model clearly identifies the skills, knowledge, and values that formulate clinical competency and develops an iterative evaluation and learning strategy to meet evolving standards of evidence-based practices (Falender & Shafranske, 2007). Defining what it means to be competent poses a challenge, as "it may be easier to require psychologists [and supervisees] to be competent than it is to define what competence means, [and] competence is sometimes easier to identify in its absence than it is to specify what a proficient level of practical or scientific expertise involves” (Kitchener, 2000 pp. 154-155). Despite the challenges posed by defining “competency”, the APA repeatedly emphasized that “supervisors possess up-to-date knowledge and skills regarding the areas being supervised (e.g., psychotherapy, research, assessment)” (*APA Guidelines for Clinical Supervision in Health Service Psychology*, n.d.). Additionally, a supervisor must strive to be proficient when using technology during supervision. However, there is little support or formal training to help bring these competency guidelines to fruition. Instead, supervisors may continue to use methods they are most familiar and comfortable using, relying on how they were taught

during their own training, rather than referencing and incorporating the newest empirical literature.

Measurement Based Care (MBC) is a data-driven method for systematically evaluating treatment as it progresses using both ideographic and evidenced-based measures (e.g., validated symptom rating scales) as a supplement to clinical care (Fortney et al., 2017; Scott & Lewis, 2015). Originally referred to as routine outcome monitoring (ROM), the emphasis has shifted from a focus on routinely tracking progress to a more sophisticated understanding of the importance of integrating the measurement results into treatment planning to inform care. MBC is trans-diagnostic and trans-theoretical, which facilitates use in a wide variety of clinical settings and interactions.

Careful tracking of patient reported outcome measures (PROMs) has the potential to improve accountability and maximize the quality of interventions by clinicians (Cruz et al., 2020; Harding et al., 2011). Although psychological treatment can be highly effective, psychotherapy outcome studies approximate that between 5-14% of clients worsen over the course of treatment (Lambert & Shimokawa, 2011). Relying on clinical judgment alone, mental health providers are only able to detect progressive increases in severity of symptoms in 21.4% of their clients who are deteriorating, meaning that a sizable percentage of worsening clients go unidentified (Fortney et al., 2017; Hatfield et al., 2010). Even more worrisome, the rates of identification are even lower for clients whose progress is stagnated (Bickman et al., 2011; Cruz et al., 2020; Fortney et al., 2017; Garland et al., 2003). MBC can be used to address worsening or stagnated progress through providing additional data to the clinician so treatment can be altered and adapted more swiftly than if relying on clinical judgment alone (Guo et al., 2015). In a RCT comparing the outcomes of depressed outpatients treated with psychiatric medication alone to

depressed outpatients treated with psychiatric medication plus MBT, Guo et al. (2015) found the MBC group improved more rapidly than the control group. Much of the improvement is attributed to the psychiatrists in the MBC condition changing medication dosages more quickly and more frequently in response to MBC feedback regarding client's worsening or stagnated symptom progress than the psychiatrists in the non-MBC group.

Large gaps between outcomes found in randomized control trials (RCTs) and effectiveness in real world mental health care have been identified. One contributing factor may be that RCT protocols "include systematic measurement of symptom severity, followed by algorithm-based treatment adjustments when patients are not responding to care" (Fortney et al., 2017). Regular use of MBC can address this difference, and improve clinical decision making, efficacy, and effectiveness of treatment (Manring et al., 2019). In fact, aggregated MBC data has been used to monitor effectiveness of treatments at a site-wide level and can help clinicians better choose and tailor their treatment components to their clients (Fortney et al., 2017). In psychiatry, supervisors have used MBC to target areas of deficiency and to suggest treatment adjustments, and to make sure the selected treatment is carried out as directed (McCarron et al., 2019).

MBC data can also act as an additional way to evaluate trainee performance and effectiveness of treatment (Levine et al., 2017; Swift et al., 2015). Repeated assessment, evaluation, and data driven feedback provided by MBC acts as a companion piece to the session recording to provide a more robust look at the therapeutic techniques and associated client progress. Learning to adapt treatment plans and reevaluate case conceptualizations as progress data evolves may be an important part of learning to become a science-based practitioner. While client outcomes are multicausal and cannot be used as a sole metric to evaluate clinician

performance, training a supervisee to look for patterns across different clinical presentations (e.g., anxiety vs. depression), client demographics (e.g., race, gender identity, age, etc.) and client outcomes (e.g., symptom improvement, premature termination, etc.) could elucidate patterns thus informing new training goals and further facilitating supervisee growth and development (Swift et al., 2015).

Using MBC data can improve the clinical effectiveness of treatment in a systematic way, which can help mental health providers improve their clinical skills. MBC may also enhance professional development by providing feedback to clinicians about their performance (Guo et al., 2015). For example, in psychiatry MBC has been shown to increase collaboration amongst providers and health care team members (Scott & Lewis, 2015). Not only would an increase in collaboration within the supervisory relationship be beneficial to the trainee and client, but the APA states that Assessment/Evaluation/Feedback is a necessary component of supervision.

Clinical supervision in training clinics generally consists of viewing the trainee's client session and providing notes and feedback on the decisions made within the session. In clinics that use MBC, this data provides a valuable extra layer of quantitative information about the client's progress and can help inform the direction of treatment. However, newer clinicians are often more familiar with MBC and its usage than clinicians with more years of professional experience, as MBC is increasingly used in many training clinics. A 2017 study surveyed clinic training directors regarding their use of Routine Outcome Monitoring (ROM) implementation as well as their training model for both supervisors and trainees. While 67% of respondents indicated that they used ROM in their clinics, the majority of training regarding ROM and MBC was focused on the trainee as opposed to the supervisor (Peterson & Fagan, 2017).

Since MBC is considered an evidence-based practice in its own right, the question remains as to why so few mental health service providers avail themselves of its potential. Providers who do not use MBC in their practice noted implementation challenges, like extra paperwork or time required to score the measures, as reasons they were not using it (Fortney et al., 2017). However, as Measurement Feedback System (MFS) technology has advanced, feasibility has increased, and many of the barriers previously cited as too cumbersome for MBC to be implemented have been reduced or removed entirely. A MFS is made up of two parts: 1) a digital library consisting of standardized as well as idiographic measures that can be selected and administered routinely to collect relevant measurements throughout the course of treatment and 2) a way to present the collected data quickly and in a useful way to clinicians (Bickman, 2008). The development of software platforms that auto-score client measures and present graphs, symptom change trajectory lines, alerts, etc. have addressed many of these barriers (Black et al., 2018). Of those barriers that remain, lack of training and knowledge is cited as a reason for residual hesitancy (Batty et al., 2013). A 2017 study conducted at training clinics found supervisor hesitancy to use unfamiliar measures, and lack of education regarding the clinical value of MBC were some of the largest barriers to implementing MBC (Peterson & Fagan, 2017). Evidence suggests that online training, in conjunction with professional community support (e.g., through a listserv), can drive an increase in use of MBC (Persons et al., 2016). Additionally, those who have received focused support and training regarding the use of standardized measures appear to use these tools more regularly in their daily practice (Peterson & Fagan, 2017).

It is essential that the supervisors who are directly involved in clinician training are able to understand MBC's utility and develop skills to incorporate this data into treatment

decisions. In training clinics that did provide some training in ROM for supervisors, the focus was on "guiding students on how to introduce ROM" and "how to discuss ROM data with clients" (Peterson & Fagan, 2017). While these are important aspects of ROM/MBC that should be covered by a supervisor, they do not address supervisors' competency with using MBC, their comfort interpreting clinical graphs to inform treatment, or proper measure selection. Currently, there is a lack of training specifically geared toward teaching supervisors responsible for training clinicians how to use MBC and maximize its clinical utility. This gap is significant, as supervisors' knowledge impacts their ability to effectively train new clinicians. In this study we propose that training of supervisors in the evidence-base for MBC and its relevance to clinical outcomes could improve the facilitation and use of MBC in supervision. Highly informed supervisors are instrumental to producing quality trainees and clinicians. MBC training programs could be provided to supervisors as one of the tools necessary to support trainees in a current and empirically supported manner.

Part of competency-based supervision requires continuous evaluation of skills and knowledge to ensure both supervisors and supervisees are current on best practices. Ideally, supervisors, some of whom may *volunteer* their time to mentor students, would have access to educational programming that teaches new skills and so they can maintain levels of competency. This study proposes an intervention to fill this gap.

Current study

The current study investigated whether teaching supervisors how to use MBC data within supervision would increase positive attitudes, use, and self-perceived teaching ability of the benefits of MBC in supervision. Clinical supervision is vital to the learning and success of

trainees, and to optimize the outcomes of clients by producing well-trained and competent clinicians. An evidence-based way to improve client outcomes is the utilization of MBC during clinical encounters to help guide treatment. Therefore, a Continuing Education (CE) course was developed and administered to educate supervisors about MBC, its supporting evidence, and how to incorporate and use patient MBC into their supervision sessions to inform treatment decisions. Supervisors' attitudes toward MBC, self-reported MBC use during supervision, and their self-reported ability to describe the clinical benefits of MBC were measured at multiple timepoints to investigate the following aims:

Aim 1: *Does watching the "MBC in Supervision" training video lead to higher use of self-reported MBC during supervision, with higher self-reported use by supervisors in the Reminder Group compared to the No Reminder Group?*

Aim 2: *Does watching the "MBC in Supervision" training video lead to higher/more positive attitudes toward MBC at Survey 2, and Survey 3 in both the Reminder Group, and No Reminder Groups?*

Aim 3: *Does watching the "MBC in Supervision" training video lead to increased self-reported ability to describe clinical benefits of MBC to supervisees in both the Reminder Group, and No Reminder Group?*

Methods

This longitudinal intervention study consisted of 3 waves of data collection, a uniform video intervention, and two test groups. Participants consented to participate in the study and were directed to take Survey 1. Survey 1 measured self-reported baseline attitudes, use of MBC during supervision over the last month, and teaching ability of the clinical benefits of MBC.

After completing Survey 1 (baseline), participants were emailed a link to the MBC training video and Survey 2. Survey 2 was completed by all participants after watching the MBC training video, and assessed self-reported attitudes toward MBC, likelihood to use MBC during supervision, and teaching ability of the benefits of MBC. All participants who completed Survey 2 were then randomly assigned into one of the two conditions - the MBC Reminder Group or MBC No Reminder Group. After 30 days had passed from the completion of Survey 2, participants were sent a link to Survey 3, which measured the impact of the MBC training video on attitudes toward MBC, self-reported use of MBC during supervision over the last month, and teaching ability.

Participants

A total of 52 participants consented to the study. Participants were eligible if they were licensed mental health professionals who were currently acting as clinical supervisors for clinicians in training. Participants were recruited online using professional listservs as well as other online platforms (i.e., Twitter, Facebook groups). Participants were compensated by one hour of Continuing Education (CE) credit, issued by the University of Washington. Institutional Review Board (IRB) approval was obtained from the University of Washington IRB in January 2022, and the study qualified for exempt status (Category 101).

Procedure

Participants consented to the study using a RedCap hosted consent form. All surveys were hosted and distributed using Qualtrics survey platform. Upon consenting, participants were directed to complete Survey 1 which consisted of demographic questions (i.e., “How long have

you been licensed?," "What is your theoretical orientation to practice?," etc.,) as well as questions about current attitudes toward MBC, and use of MBC during clinical supervision. Participants were also asked to self-rate their ability to teach or explain the clinical benefits of MBC to another person.

Upon completion of Survey 1, participants were emailed a link to the MBC training video and a link to Survey 2. The MBC training video was a 50-minute video developed by the lead researcher on the study. The video was designed to address noted barriers to MBC use within training clinics - namely supervisor hesitancy due to unfamiliarity with MBC and lack of supervisor education regarding the clinical value of MBC (Peterson & Fagan, 2017). The video began with a 15-minute introduction and brief summary of the evidence base of MBC, and specific examples of how MBC use during supervision can be of particular importance and clinical utility. The video proceeded to address six themes through a series of role-plays between the lead researcher (acting in the role of the clinician in training) and an expert in MBC training (acting in the role of the clinical supervisor). The role plays ranged from three to seven minutes apiece, and covered the following themes:

- *Using progress and process measures to aid in case formulation and planning*
- *Addressing supervisee hesitancy regarding MBC*
- *Measure selection*
- *Using standard and idiographic measures*
- *Using graphs to understand symptom patterns*
- *Preparing for client graduation from treatment*

The aim of the video was to address both supervisors' unfamiliarity with MBC as well as specific examples of how MBC could be useful in clinical supervision settings.

Participants were instructed to watch the video when they were able and then to complete Survey 2. Survey 2 asked questions about attitudes toward MBC and requested that participants rate the likelihood that they would use MBC during supervision, as well as their ability to explain the clinical benefits of MBC.

After Survey 2 was complete, participants were randomly assigned into one of two groups – the Reminder Group or No Reminder Group. Those assigned into the Reminder Group received an email each week reminding participants of the benefits of using MBC in supervision covered in the MBC training video. Participants assigned to the No Reminder Group did not receive any correspondence from the researcher. After 30 days had passed from the completion of Survey 2, participants were sent Survey 3, which again measured attitudes toward MBC, self-reported use in supervision over the last month, and ability to teach the benefits of MBC.

Measures

Monitoring and Feedback Attitudes (MFA) Scale

The Monitoring and Feedback Attitudes (MFA) scale measures attitudes towards MBC use and was used in Survey 1, 2 and 3 (Jensen-Doss et al., 2014). The MFA scale uses a 5-point Likert scale ranging from 1-5, strongly disagree to strongly agree.

Current Assessment Practice Evaluation Revised (CAPER)

The Current Assessment Practice Evaluation Revised (CAPER) measures self-reported MBC use in client sessions over the last month (Lyon et al, 2015). This measure was adapted to measure MBC use in clinical supervision and referred to as the Current Assessment Practice Evaluation – Supervisor Revised (CAPER-SR). The CAPER-SR measured average self-reported

MBC use during supervision sessions over the last month. This was administered at Survey 1 and Survey 3. This measure was adapted a second time to capture likelihood to use MBC in supervision sessions and was administered in Survey 2 immediately upon watching the video intervention (CAPER-Supervisor Change, or CAPER-SC). Both the CAPER-SR and the CAPER-SC use a 4-point Likert scale ranging from 1-4, none of the time (0%) to most of the time (61%100%).

Teaching Ability

Participants were asked about self-perceived teaching ability regarding MBC benefits at Surveys 1, 2, and 3. These items used a 5-point Likert scale ranging from 1-5, not at all able to extremely able.

Analytic Plan

Upon completion of data collection, a multilevel model will be conducted to investigate the three aims, accounting for within-participant variation by time (Level 1), participants' Reminder/No Reminder Group assignment (Level 2), and then the cross-level interaction of time by group. The hypothesized results of this analysis are as follows:

Aim 1: Watching the "MBC in Supervision" training video will lead to higher use of self-reported MBC use during supervision, with higher self-reported use by supervisors in the Reminder Group.

Aim 2: Watching the "MBC in Supervision" training video will lead to higher/more positive attitudes toward MBC at Survey 2, and Survey 3 in both the Reminder Group, and No Reminder Groups.

Aim 3: Watching the "MBC in Supervision" training video will lead to increased self-reported ability to describe clinical benefits of MBC to supervisees in both the Reminder Group, and No Reminder Group.

Results

Demographics and Adherence

Of the participants who completed at least Survey 1 and 2 (n = 36), 39% of participants identified their theoretical orientation as Behavioral followed by 19% of whom endorsed a Cognitive-Behavioral or Eclectic approach to treatment. Additionally, 31% of participants reported being involved in supervision for more than 15 years. Demographic information for participants who completed Surveys 1 and 2 (n = 36) can be found in Table 1. Longitudinal adherence was 70% from Survey 1 to Survey 2 *(*n = 36) and 66.6% from Survey 2 to Survey 3 (n = 24).

Aim 1: MBC use during supervision

Watching the MBC in Supervision training video will lead to higher use of MBC during supervision, with higher use by supervisors in the Reminder Group.

Aim 1 measured self-reported MBC use during supervision in the participants using the Current Assessment Practice Evaluation Revised – Supervisor Revised (CAPER-SR) at Surveys 1 and 3, and the CAPER-SC (Supervisor Change) at Survey 2 (Lyon et al, 2015). When calculating the means of the CAPER-SC and CAPER-SR only the participants who completed at all three timepoints were included (n = 24). At Survey 1 participants reported using MBC during supervision between some of the time (1%-39%) and half of the time (40%-60%) (M = 2.52, SD

= 0.85). After watching the MBC training video, participants reported that they were likely to use MBC during supervision between half of the time (40%-60%) and most of the time (61%-100%) (M = 3.34, SD = 0.72), an increase from their use reported at Survey 1. At Survey 3, participants said they used MBC during supervision about half of the time (40%-60%) indicating that increases in MBC use after watching the training video were sustained for at least 30 days (i.e., Survey 3 > Survey 1) (M = 2.76, SD = 0.65). However, the participants in the Reminder Group reported a mean of 2.75 (SD = 0.69) while the No Reminder Group reported a mean of 2.78 (SD = 0.61) indicating that reminders may not impact self-reported behavior change.

A dependent sample t-test was conducted to determine if the participants reported being more likely to use MBC after watching the training video compared to their baseline reported MBC use. The t-test was conducted using participant data from Surveys 1 and 2 (n = 36) in R-Studio. When comparing participants' reported use to their reported likelihood to use MBC during supervision before and after watching the MBC training video, the changes were statistically significant ($t(35) = 7.08$, $p < .001$). This indicates that participants reported being more likely to use MBC during supervision after watching the training video when compared to their self-reported use of MBC during supervision in the last 30 days.

Aim 2: Attitude Change

Watching the MBC in Supervision Training video will lead to higher/more positive attitudes toward MBC at Survey 2, and Survey 3 regardless of reminder condition

Aim 2 measured change in attitudes towards MBC using the Monitoring and Feedback Attitudes (MFA) scale at Surveys 1, 2 and 3 (Jensen-Doss et al., 2014). When calculating the means for the MFA scale only participants who completed all three surveys were included (n =

24). At Survey 1 participants reported a mean of 4.08 (*SD* = 0.63), indicating positive attitudes towards MBC use. After watching the MBC training video and taking Survey 2, those mean scores increased to 4.26 (*SD* = 0.59). For Survey 3, the participants who received a reminder email *(n* = 14) reported a mean of 4.4 (*SD* = 0.43) indicating favorable views toward MBC, rating most items between agree and strongly agree. Those who did not receive a reminder email reported a mean of 3.9 (*SD* = 0.66). This indicates that sending an email reminder of the benefits of MBC use during supervision positively impacts attitudes at Survey 3 (i.e., Survey 3 - Reminder Group > Survey 1; Survey 3 - No Reminder Group < Survey 1).

A dependent sample t-test was performed to ascertain if the training video significantly impacted participants' attitudes towards MBC. Again, participants who completed Survey 1 and 2 were included in this analysis (*n* = 36). The results were statistically significant ($t(35) = 3.71$, $p < .001$) indicating that participants endorsed having more positive attitudes towards MBC after watching the training video when compared to their baseline attitude scores measured at Survey 1.

Aim 3: MBC Teaching Ability

Watching the MBC in Supervision Training video will lead to increased abilities to describe clinical benefits of MBC to supervisees, regardless of reminder condition

Aim 3 measured self-perceived teaching ability about MBC benefits at Surveys 1, 2, and 3. When calculating the means only participants who completed all three surveys were included (*n* = 24). At Survey 1 participants reported a moderate ability to explain the clinical benefits of MBC to a supervisee (*M* = 3.41, *SD* = 0.90). After watching the MBC training video and taking Survey 2, mean scores increased to 4.31 (*SD* = 0.64). At Survey 3, the participants who received

a reminder email (n = 14) reported a mean of 4.14 (SD = 0.53) and those who did not receive a reminder email reported a mean of 3.55 (SD = 0.92), indicating that sending an email reminder of the benefits of MBC use during supervision positively impacts perceived teaching ability at 30-day follow up.

A dependent sample t-test was performed to test if self-perception of teaching ability was significantly impacted by watching the MBC training video. Participants who completed Survey 1 and 2 were included in this analysis (n = 36). The results were statistically significant ($t(35) = 7.76$, $p < .001$), indicating that participants perceived their ability to teach the benefits of MBC to a supervisee more positively after watching the MBC training video.

Discussion

Future mental health professionals owe a sizable amount of their learning and expertise to their clinical supervisors (Balon, 2019). Supervisors hold the responsibility of shaping and pushing their supervisees to apply theoretical knowledge to real life therapy situations and are ultimately responsible for ensuring mental health care is provided safely and ethically by these new clinicians (Weerasekera, 2019). Clinical supervisors are often left to their own devices when figuring out how they would like to supervise their supervisees, and are not required to undergo specific supervision training, nor are they provided training necessary to stay up to date on latest evidence-based treatments (Falender & Shafranske, 2017). MBC has been shown to be helpful in monitoring client progress as well as additional feedback in training clinics to follow supervisee learning (Fortney et al., 2017; Swift et al., 2015). This study sought to address known barriers to supervisor MBC use through a continuing education training video detailing the evidence base for MBC and its utility in clinical supervision. The preliminary analyses indicated that watching

the MBC training video significantly improved self-reported MBC use during supervision, attitudes towards MBC, and self-perceived teaching ability of the participants when compared to participants' baseline scores. However, the results did not support the hypothesis receiving a reminder email detailing the benefits of using MBC during supervision would lead to higher levels of reported MBC use. Instead, we saw that the reminder email did not seem to impact self-reported MBC use. Contrary to our hypotheses, the reminder emails did appear to impact participants' attitudes towards MBC and perceived teaching ability, with the participants in the Reminder Group endorsing more positive attitudes towards MBC/perceived teaching ability than those in the No Reminder Group.

Limitations

The results presented here are findings of the preliminary data, as data collection is still ongoing. One of the biggest limitations and challenges of this study was participant attrition. Analysis of dropout after Survey 1 could provide insight into which participants are more likely to engage in MBC video training and illuminate potential predictive factors for participant dropout (e.g., theoretical orientation, number of years as a supervisor, previous knowledge of MBC). Upon completion of the data collection, this analysis will be conducted to better inform participant recruitment practices for future iterations of this study. Additionally, qualitative data regarding reasons for drop out as well as general feedback on the MBC training video may have been useful if collected, as such information may have provided further insight to barriers and facilitators of the study and video implementation. Finally, there was not a manipulation check within the study design to monitor if the Reminder Group opened or read the reminder email

each week. As such, any findings indicating significant group differences between the Reminder Group and No Reminder Group should be interpreted with caution.

Future Directions

As discussed, attitudes towards MBC, reported MBC use, and self-perceived teaching ability were impacted by watching the video, but when looking at reminder groups it appears that attitudes and self-perception of teaching ability were more readily impacted by email reminders than was behavior/MBC use. This prompts questions as to what could be done to impact participant behavior more effectively, specifically regarding MBC use during supervision. Future studies may consider expanding the types of "ongoing support" offered to participants to better understand potential mechanisms involved in increasing MBC use during supervision. Examples of future ongoing support options could include didactic trainings, participants engaging in role plays with real time feedback, or a livelier form of ongoing support (e.g., Slack channel or message board).

Conclusion

The preliminary results of this study indicate that watching the MBC training video significantly increased supervisors' self-reported attitudes toward MBC, perceived ability to teach the benefits of MBC, and self-reported likelihood of incorporating MBC during clinical supervision when compared to their baseline scores at Survey 1. Additionally, the data suggests that attitudes toward MBC are more malleable than self-reported MBC use during supervision. Contrary to previous findings, receiving ongoing support via a weekly email (Reminder Group)

did not significantly impact behavior change/MBC use during supervision. However, weekly reminder emails did impact supervisors' attitudes towards MBC.

This is a promising start to addressing the noted barriers of supervisors regularly using MBC during clinical supervision, namely lack of familiarity with MBC and education in MBC's evidence base. The results indicate that a simple video intervention and training positively impacts use and attitudes, with sustained improvement maintained over 30 days. Given the importance of using MBC during clinical supervision to aid in clinician training, and its potential impact on client outcomes, it is the hope that this study will influence clinical supervisors training models and the important role measurement based care can play in clinical supervision will be common knowledge.

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Table 1

Participant Demographics for Survey 1 and Survey 2 Participants

	n = 36	%
Years Providing Supervision Post Licensure		
Less than 6 months	3	8%
1-5 years	9	25%
5-10 years	8	22%
10-15 years	5	14%
More than 15 years	11	31%
Theoretical Orientation		
Psychodynamic	0	0%
Cognitive	3	8%
Behavioral	14	39%
Cognitive/Behavioral	7	19%
Humanistic	1	3%
Systemic	1	3%
Eclectic	7	19%
Other	3	8%