Clinical Supervision: A Potential Implementation Strategy to Improve Implementation Climate

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Abstract

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Implementing evidence-based treatments (EBTs) in community mental health settings has been challenging. A positive EBT implementation climate—employees' perception that EBT use is expected, supported and rewarded in their organization—could lead to EBT uptake. Clinical supervisors may shape their clinicians' perceptions of their organization. This study assessed whether EBT-focused supervision and supervisor- and clinician-level factors affect EBT implementation climate. Clinicians were randomized to supervision conditions: Symptom & Fidelity Monitoring (SFM) alone or SFM + Behavioral Rehearsal (BR). Along with supervisors, they completed self-report measures at baseline and follow-up. Relationships between predictors and EBT implementation climate were examined using a two-level multilevel model with random effects at the supervisor level. Greater self-efficacy in supervising was associated with a more positive EBT implementation climate, particularly when supervision involves monitoring both client symptoms and clinician fidelity as well as incorporating role-plays. Thus, EBT-focused supervision practices combined with certain supervisor characteristics (e.g., self-efficacy) show promise—as a strategy—in facilitating a positive EBT implementation climate.

Over the last couple of decades, a wide range of evidence-based treatments (EBTs) for youth with mental health problems have been developed (Weisz et al., 2014). However, integrating these EBTs as well as sustaining their implementation in community-based mental health settings has been a challenge (Aarons et al., 2014; Griffiths, 1999; Southam-Gerow et al., 2012). Initial efforts to support EBT integration into clinical practice involved training clinicians in EBTs, which resulted in little to no change in their sustained uptake (Fixsen et al., 2005). Implementation research suggests that the limited impact from training alone could be due to the lack of consideration of key implementation factors beyond clinical training that may facilitate EBT uptake (Fixsen et al., 2005).

Successful implementation of an innovation — in this case an EBT — in a given organization depends on various stakeholders' buy-in (e.g., employed clinicians, supervisors, clinic directors). Research and theory posit that the organizational context can influence attitudes towards, adoption of, and consistent use of a particular innovation (Aarons, 2005; Aarons & Sawitzky, 2006; Greenhalgh et al., 2004; Li et al., 2018). Most of the current research on organizational context's influence on EBT implementation has focused on molar or general measures of organizational culture and climate (i.e., employees' shared perception of how their work environment affects their personal well-being), which has been found to be associated with improved client outcomes and successful implementation (Bonham et al., 2014; Glisson et al., 2010). One organizational construct that differs from these more general organizational measures is *Implementation Climate* as it is strategy focused and innovation specific (Weiner et al., 2011). Klein and Sorra (1996) defined implementation climate as organizational members' shared perception that using a particular innovation is expected, supported, and rewarded. They proposed that a strong or positive implementation climate promotes effective implementation of

an innovation by ensuring that the innovation adopters possess the necessary resources and skills for innovation use (Klein & Sorra, 1996). Studies have shown that a positive EBT implementation climate is associated with more successful EBT implementation (Asgary-Eden & Lee, 2012; Ditty et al., 2015) and an increased EBT content coverage in supervision (Lucid et al., 2018). Further, Williams and colleagues found that organizations with *both positive* molar organizational climates and EBT implementation climate saw an increased use of EBTs (Williams et al., 2018). Nevertheless, very few, if any, studies have examined what leads to a more positive EBT implementation climate in an organization, particularly in community-based mental health settings.

Proctor et al. (2009) developed a conceptual model of implementation research which suggests that EBTs could be integrated into clinical settings via implementation strategies, which are specific activities or efforts designed to improve the uptake and sustainability of interventions. Clinical supervision, an ongoing professional process in which a clinician is provided with clinical guidance and feedback on their practice (Milne, 2007), garnered very little empirical attention as an implementation strategy despite accounting for 16% of the variance of client outcomes (Callahan et al., 2009). Supervision, if used effectively, is potentially a natural and sustainable strategy for supporting the implementation of EBTs (Dorsey et al., 2013), and may be one feasible way to create a more positive EBT implementation climate.

A growing body of work points to organizational leaders as having the capacity to enable organizational change and innovation (Aarons et al., 2015; Aarons, Ehrhart, Torres, et al., 2017; Powell et al., 2017). Top-level managers (e.g., clinic directors) typically put implementation policies and practices into place that can shape implementation climate, though the literature suggests that implementation climate can be influenced by varying roles in an organization

(Birken et al., 2012; Birken et al., 2018). For example, first-level leaders (or middle managers)—those who supervise individuals that deliver services—are in a position that allows them to facilitate EBT implementation (Aarons et al., 2015; Schein, 2010). Thus, research points to leveraging the power of those in middle managerial roles (e.g., supervisors) to facilitate a positive implementation climate, and in turn improve implementation success (Aarons, Ehrhart, Moullin, et al., 2017; Aarons & Sommerfeld, 2012; S. Birken et al., 2018). Birken et al. (2012) developed a theoretical framework proposing that middle managers (e.g., supervisors) express their commitment to an innovation (e.g., an EBT) via several mechanisms (e.g., selling EBT implementation by presenting or encouraging stakeholders to participate in implementation), which can influence implementation climate and subsequently affect implementation success. There is limited research examining the middle manager role in a mental health care setting. One study found that first-level leaders who use specific implementation leadership behaviors (e.g., daily support of evidence-based practice implementation) to create a more positive EBT implementation climate within their clinic can facilitate successful EBT implementation (Williams et al., 2020). However, more research is needed to investigate how different types of supervision strategies can facilitate a more positive EBT implementation climate. In efficacy trials, a relatively common set of "gold standard" supervision practices have been used to support clinical practice, including behavioral rehearsal, symptom monitoring, fidelity monitoring, and review of actual practice (e.g., watching and a reviewing a taped clinical session) (Dorsey et al., 2013). However, there is little empirical guidance around which strategy is most important or which combination is the most effective especially at improving EBT implementation.

Current Study

The purpose of this current study is to assess whether (1) EBT-focused clinical supervision strategies and (2) other clinician- and supervisor-level factors are associated with a more positive EBT implementation climate. To our knowledge, this is one of the first studies to examine what predicts a positive EBT implementation climate since this construct has commonly been studied as a predictor of EBT implementation success. This study uses data from a randomized controlled trial (RCT; Dorsey et al., 2013) testing two packages of gold standard supervision strategies (i.e., symptom and fidelity monitoring [SFM] compared to SFM plus behavioral rehearsal [SFM+BR]) on treatment fidelity and clinical outcomes. We hypothesized that clinicians' receipt of these more structured, EBT-focused supervision conditions would be associated with their increased positive perception of EBT implementation climate. Further, given prior research linking simultaneously positive molar organizational climate *and* implementation climate to implementation success, we hypothesized that molar organizational climate moderates the relationship between EBT implementation climate from baseline and at follow-up. Our study and hypotheses have been pre-registered at Open Science Framework: (https://osf.io/pzmg3/?view_only=4cfb018b62714a30939808064e6894ef).

Methods

This present study uses data from a NIMH-funded project examining workplace-based clinical supervision, the Supervision to Enhance Practice Study (STEPS; Dorsey et al., 2013; ClinicalTrials.gov, NCT01800266). STEPS builds on an existing implementation effort in Washington State called the Washington State Trauma-focused Cognitive Behavioral Therapy Initiative (WA TF-CBT Initiative). This initiative solely focused on TF-CBT in 2007 and was

subsequently extended to include CBT for depression, anxiety, and behavioral problems (Dorsey et al., 2016). The initiative received about 100 – 250 trainees per year, and training took place over the course of two days, which increased to three days after the inclusion of other forms of treatment targets. As of 2015, the WA Initiative covered 80% of community mental health organizations, training over 900 community-based supervisors and clinicians. Included organizations are qualified to send new clinicians for yearly trainings. Participation in training involves sending clinicians and at least one supervisor to a two (TF-CBT only) or three-day (broader focus) training in addition to a six-month follow-up for consultation. Optional additional training was available for supervisors through monthly technical assistance calls and a yearly one-day supervisor training, covering supervision-specific and TF-CBT content. Leaders in organizations participating for the first time received minimal support (e.g., phone consultations to ensure training and consultations were clearly understood, to discuss strategies to combat challenges, and to demonstrate a commitment to supporting them). All organizations who were active participants in the WA TF-CBT Initiative, defined as currently implementing TF-CBT and having at least one TF-CBT trained supervisor ($N = 33$, 75% of the organizations trained in STEPS since 2012), received an invitation to participate in STEPS, and 25 (76%) of these 33 organizations enrolled in this study.

Participants

Study participants were supervisors and clinicians that were selected from agencies that were part of the WA TF-CBT Initiative. Eligible clinicians had to be trained in TF-CBT as part of the WA TF-CBT Initiative and/or have completed the TF-CBT web training with at least one TF-CBT case underway, at least 50% full-time employees at one of the participating agencies, supervised by a participating supervisor, and able to provide TF-CBT in English. Exclusion

criteria included immediate plans to leave the agency or transition into a non-child/adolescent caseload carrying position.

Clinicians (N = 120) were predominantly White (84.2%, n = 101), female (83.3%, n = 100) and had a master's degree (91.7%, n = 110). Over 65% noted cognitive-behavioral as their primary psychotherapy theoretical orientation. Clinicians, on average, were 36 years of age (SD = 10.11), provided psychotherapy for 4.88 years (SD = 5.91), have been working at their organization for 2.93 years (SD = 3.48), and had an active client caseload of 35.43 (SD = 14.01). Supervisors (N = 37) were predominantly White (89.2%, n = 33), female (75.7%, n = 28) and had a master's degree (94.6%, n = 35). Over 75% noted cognitive-behavioral as their primary theoretical orientation. Supervisors, on average, were 42.11 years of age (SD = 10.31), provided psychotherapy for 12.58 years (SD = 6.25), have been working at their organization for 8.75 years (SD = 6.80), and had 9.50 supervisees (SD = 3.87). Table 1 summarizes participating clinicians' and supervisors' characteristics.

Procedure

STEPS was a two-phase, mixed within- and between-subjects design studying supervision practices of TF-CBT. In Phase I, we examined "usual-care" supervision strategies of community-based supervisors with experience in delivering and supervising TF-CBT. Phase II was an RCT in which clinicians were randomized to one of two supervision practices—both of which include "gold standard" strategies: (1) SFM alone or (2) SFM + BR. Supervisors delivered both conditions with random audiotape audits of adherence to condition. Data for this study includes clinician self-report from surveys collected via Qualtrics that were administered to participants at Phase I baseline, Phase II baseline, and Phase II 1-year follow-up. Supervisors received $30 or $40 gift cards (depending on when they were enrolled) whereas clinicians

received $30 gift cards for their time to complete the surveys. Study procedures were approved by the Washington State Institutional Review Board (WA IRB).

Symptom and Fidelity Monitoring (SFM) Condition. Symptom monitoring involves clinicians monitoring key client symptoms each session using brief measures (via a tablet device) recommended by the WA TF-CBT Initiative; specific tools are described in detail in the parent study protocol (Dorsey et al., 2013). The online toolkit graphed symptoms over time to provide a visual representation of clients' progress to be reviewed in supervision. With regards to fidelity monitoring, using direct methods (e.g., observing an actual practice) was challenging and thus we utilized clinician self-report (Dorsey et al., 2013). Clinicians completed a TF-CBT checklist after each session, which was reviewed in supervision. The checklist was a slightly elaborated version of the TF-CBT PRACTICE checklist (E. Deblinger, PhD and colleagues, unpublished measure, 2005; PRAC TPOCS-S by Garland et al., 2010). When reviewed in supervision, supervisors were able to indicate, for their own tracking, if clinicians had completed key aspects of each TF-CBT element.

SFM + Behavioral Rehearsal (BR) Condition. The SFM+BR condition included and supplemented SFM with a strategy that serves as a feasible proxy for direct observation, also providing an opportunity for skill building. The BR was designed to be flexible and fit within time constraints. Supervisors asked clinicians to engage in 5 to 10-min role-play relevant to an upcoming session with a client receiving TF-CBT. Supervisors received a set of guidelines detailing expected content and techniques to guide BRs for every TF-CBT component. Supervisors were asked to provide constructive feedback following the BR.

Measures

Implementation Climate. Clinician-reported EBT implementation climate was measured using the Evidence-Based Organizational Checklist (citation), a 6-item questionnaire used to evaluate the degree to which organizations expect, support, and reward EBT use. The items on the questionnaire were rated on a 4-point Likert scale ranging from 1 (*Never*) to 4 (*Ongoing/Routine*), which included items such as "Clinicians are provided with EBT training opportunities and access to EBT materials." Mean scores on this measure were obtained for each clinician. Higher scores indicate a more positive EBT implementation climate. This measure demonstrated high internal consistency among clinicians in our sample ($\alpha = 0.86$).

Molar Organizational Climate. Clinician-reported organizational climate was measured using sub-scales from the Texas Christian University Organizational Readiness for Change (TCU-ORC; Lehman et al., 2002) which is a comprehensive assessment of organizational functioning and readiness for change. The three subscales we used showed high internal consistency among clinicians in our sample: organizational stress (4 items; $\alpha = 0.79$), cohesion (6 items; $\alpha = 0.84$), and communication (5 items; $\alpha = 0.80$). These subscales' items include clinicians feeling under many pressures, staff members working as a team, and clinicians' ideas get fair consideration by management, respectively. The items on the questionnaire were rated on a 5-point Likert scale ranging from 1 (*Disagree Strongly*) to 5 (*Agree Strongly*). Higher scores indicate a more positive molar organizational climate. This measure, including all three subscales, demonstrated high internal consistency among clinicians in our sample ($\alpha = 0.82$).

Self-Efficacy in Supervising. Supervisor-reported level of competency across a variety of supervision activities was measured via a 13-item questionnaire developed as part of pre-work survey for Project TF-CBT New Jersey. Items include self-reported competence in identifying

cases, supervising clinicians on TF-CBT components, encouraging the use of TF-CBT components, and adapting across situations. The items were rated on a 5-point Likert scale ranging from 1 (*Not at all*) to 5 (*Exceptionally*). Higher scores indicate higher self-efficacy in supervising. This measure demonstrated high internal consistency among clinicians in our sample ($\alpha = 0.93$).

Analysis Plan

All analyses were conducted using R version 4.1.1. Means, percentages, and standard deviations were calculated to summarize clinicians' and supervisors' demographics. We examined the relationship between EBT-focused supervision strategies and organizational EBT implementation climate using a 2-level multilevel model (MLM) with random effects at the supervisor level due to the clustered nature of clinicians within supervisors. We included variables in our MLMs that we thought may account for some of the variance in EBT implementation climate at follow-up. At Level 1 we included clinician-related factors: baseline implementation climate score, study condition (SFM + BR or SFM only), clinicians' years employed by current organization, and client caseload. At level 2 we included supervisor-related factors: molar organizational climate, number of supervisees, and self-efficacy in supervising. We also included an interaction term (molar organizational climate × baseline EBT implementation climate) to assess whether organizational climate moderates the association between EBT implementation climate at baseline and follow-up. We only used baseline measures for all variables except EBT implementation climate since baseline score was a covariate and the follow-up score was our dependent variable. With regards to our multilevel model, correlations among the independent variables were computed and we did not find any moderate or strong correlations, suggesting no evidence of multicollinearity. All the variables,

except for study condition — a categorical variable — were grand-mean centered for easier interpretability.

Results

Clinicians' mean rating of their organizational EBT implementation climate at baseline was 3.22 (*SD* = 0.75) and mean ratings slightly increased to 3.29 (*SD* = 0.67) at one year follow-up; this difference was not statistically significant. Clinicians' mean rating of their organizational climate at baseline was 3.58 (*SD* = 0.21), suggesting a positive work environment. Supervisors' mean rating of their self-efficacy supervising at baseline was 3.68 (*SD* = 0.46), suggesting moderate-to-high self-efficacy.

Multilevel Model: Factors Associated with EBT Implementation Climate at Follow-Up

Our model indicated that 30% of the variance in clinicians' perceptions of their organizations' EBT implementation climate clustered at the supervisor level (ICC = 0.30). Therefore, clinicians' report on EBT implementation climate may be attributed to both supervisor- and clinician-level factors. See Table 2 for MLMs predicting EBT implementation climate. Study condition was not significantly associated with EBT implementation climate at follow-up ($\beta = 0.01$, $p = 0.87$). Baseline EBT implementation climate was statistically significantly associated with a more positive EBT implementation climate at follow-up ($\beta = 0.50$, $p < 0.001$). Moreover, supervisors' self-efficacy in supervising was also significantly associated with EBT implementation climate ($\beta = 0.31$, $p = 0.02$). For every unit increase in supervisors' self-efficacy in supervising score above the average self-efficacy supervising score for the sample, there was a 0.31 unit increase in EBT implementation climate. In summary, when controlling for covariates, higher baseline EBT implementation climate and supervisors' self-efficacy in supervising scores were associated with a more positive EBT implementation climate

at follow-up. No other covariates or interaction terms were significantly associated with EBT implementation climate.

Exploratory Analysis: Assessing Condition × Self-Efficacy in Supervising Interaction Effect on EBT Implementation Climate

Given that greater self-efficacy in supervising was associated with a more positive EBT implementation climate, this prompted us to think about understanding what may influence supervisors' self-efficacy in supervising. More specifically, we became interested in assessing the interaction between supervision condition (i.e., SFM alone vs. SFM+BR) and supervisors' self-efficacy in their effect on EBT implementation climate. Using the same multilevel model, we added a condition × supervisor self-efficacy interaction term and removed clinicians' client caseload as a covariate due to its insignificant association with EBT implementation climate. The model indicated that 36% of the variance in clinicians' perceptions of their organizations' EBT implementation climate clustered at the supervisor level (ICC = 0.36). Therefore, clinicians' report on EBT implementation climate may be attributed to both supervisor- and clinician-level factors. As seen in Table 2, there was a statistically significant supervision condition × self-efficacy in supervising interaction effect after adjusting for variation in our covariates ($\beta = 0.32$, $p = 0.03$). For clinicians in the SFM+BR condition (vs. SFM alone), there was an increase in supervisors' TF-CBT supervision self-efficacy was associated with a more positive clinician-perceived EBT implementation climate. Said differently, when a supervisor's self-efficacy in supervising was 0.5 point above the mean, the EBT implementation climate scores were higher for clinicians in the SFM+BR condition compared to SFM alone. See Figure 1 for an illustration of how supervisors' self-efficacy in supervising's effect on EBT implementation climate varies by study condition.

Discussion

A rich body of theoretical work suggests that a positive implementation climate can lead to successful implementation of a given innovation (Klein & Sorra, 1996; Weiner et al., 2011). Yet, empirical studies of implementation climate are limited. Most of this limited empirical research has focused on implementation climate as a predictor or determinant of successful EBT implementation, with very little attention to what determinants might contribute to a positive EBT implementation climate. As such, identifying factors that promote a positive EBT implementation climate will advance our understanding of the potential mechanisms through which certain implementation strategies (e.g., supervision) may affect EBT implementation success. We focused on whether EBT-focused supervision—an implementation strategy—was associated with a more positive EBT implementation climate. We also assessed under what conditions EBT-focused supervision may impact EBT implementation climate. To our knowledge, this study is among the first to examine predictors of EBT implementation climate. When supervisors have greater self-efficacy in supervising EBT delivery, clinicians increasingly perceive a more positive EBT implementation climate at follow-up. These findings are consistent with existing evidence that individuals in middle-manager roles may play a critical role in facilitating successful EBT implementation (Aarons et al., 2014; S. Birken et al., 2018; Williams et al., 2020). These findings are also among the first revealing characteristics of supervisors that may promote a stronger EBT implementation climate which could in turn improve EBT use.

We hypothesized that the supervision condition clinicians were randomly assigned to would be associated with a more positive EBT implementation climate at follow-up. Our hypothesis was not confirmed. It is important to note that baseline EBT implementation climate scores were quite high leaving little room for improvement at one-year follow-up. This ceiling

effect restricted our ability to detect an effect. Having more variability in baseline EBT implementation climate scores would have provided a more nuanced understanding of how certain factors influence clinicians' perceptions of EBT implementation climate. We also hypothesized that molar organizational climate would be associated with a more positive EBT implementation climate at follow-up. Contrary to our hypothesis, molar organizational climate was not significantly associated with EBT implementation climate. This is particularly surprising as our findings diverge from previous examinations of molar organizational climate and EBT implementation climate (Williams et al., 2018). This may be due to the aforementioned ceiling effects such that participating clinicians perceived their organizations to have high organizational climate and EBT implementation climate at baseline. Alternatively, depending on context, molar organizational climate may not necessarily be as important as other factors in its effects on EBT implementation climate. Lastly, supervisors' self-efficacy in supervising was associated with a more positive EBT implementation climate. In other words, when supervisors felt competent in supervising, their clinicians were more likely to perceive a more positive organizational EBT implementation climate at one-year follow-up. This highlights the importance of supervisors feeling competent in supervising EBT delivery as that can potentially communicate their commitment to and endorsement of EBT use, which in turn signals to clinicians that their organization values EBT use. Consequently, clinicians may perceive a positive organizational EBT implementation climate, ultimately leading to EBT implementation success.

The association between self-efficacy in supervising and a positive EBT implementation climate prompted exploratory analyses in which we found that the effect of supervisors' self-efficacy on EBT implementation climate was stronger when clinicians received SFM + BR compared to SFM alone. In the SFM alone condition, emphasis is placed on clinicians'

performance in improving clients' symptoms and delivering TF-CBT as intended — a condition in which the supervisor's self-efficacy in supervising may not necessarily be salient. In contrast, the addition of BR (i.e., role-plays) in supervision places an additional emphasis on the supervisors' clinical skills. During these role-plays, supervisors get an opportunity to provide the clinician with even more feedback (e.g., how to engage child in treatment) because through role-plays, supervisors get to see more than just clinicians' treatment fidelity and clients' symptoms reduction, which is a potential advantage the SFM+BR condition has over SFM alone. Thus, the addition of BR may make self-efficacy in supervising more salient as the supervisor may be providing more clinical guidance and would thus influence clinicians' perceptions of their organizations' EBT implementation climate. That being said, we want to be cautious in our interpretation of these findings due to their exploratory nature. More research is needed to better understand how different combinations of supervision practices and supervisor characteristics may help facilitate a stronger EBT implementation climate.

Limitations

Our study had some limitations. First, our relatively small sample size and lack of diversity in participating clinicians' and supervisors' characteristics limit the generalizability of our findings. For instance, Washington State has an established EBT training initiative (Dorsey et al., 2016), and thus participating supervisors and clinicians may not be representative of psychotherapy theoretical orientations. Second, supervisors and their clinicians self-selected into the parent study and thus were not a random sample of the population. Third, clinicians' EBT implementation climate scores are commonly aggregated to the organization-level. We were unable to do that because our MLMs failed to converge when a third level (organization) was added. Further, aggregating climate scores to the supervisor-level would prevent us from

assessing the effect of the supervision condition clinicians were randomized to on EBT implementation climate at one-year follow-up. Fourth, in this study, we compared two EBT-focused supervision packages, and due to not having a true control condition, we were limited in our ability to isolate effects. Lastly, due to the parent study's focus on TF-CBT, we are unable to generalize our claims to other EBTs.

Conclusions

Taken altogether, the findings from this study build on existing theory and evidence that middle managers (e.g., supervisors) can play an integral role in EBT implementation. Moreover, this study's findings are among the first to specifically look at predictors of positive EBT implementation climate. We found that greater self-efficacy in supervising can improve clinicians' perceptions of their organizational EBT implementation climate. Our exploratory findings also show that combining SFM with BR, as a supervision strategy, coupled with high self-efficacy in supervising may yield a more positive EBT implementation climate. Broadly, future work should continue to examine what predicts a positive organizational EBT implementation climate, particularly among diverse organizations. For example, organizations with varying levels of baseline molar and EBT implementation climates or more variability in supervisors' and clinicians' psychotherapy theoretical orientations would help us understand what factors are most effective at strengthening EBT implementation climate for each context. Further, given the effect of supervisor self-efficacy in supervising on EBT implementation climate, it would be imperative to study predictors of greater self-efficacy in supervising and to better understand how supervisors' self-efficacy in supervising communicates to clinicians that their organization values EBT use. This study points to clinical supervision as a potential implementation strategy and highlights the importance of examining clinician- and supervisor-

level factors that may complement supervision to ameliorate EBT implementation efforts and ultimately enhance the quality of care in community mental health settings.

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Table 1. Participating Clinicians' and Supervisors' Characteristics

	Clinicians (*N* = 120)	**Supervisors (*N* = 37)**
Race (*n*)		
White	101	33
Asian	2	2
Black	1	0
American Indian or Alaska Native	0	0
Native Hawaiian or other Pacific Islander	1	1
Latino or Hispanic	7	1
Multiracial	9	0
Other	8	0
Female (%)	83.3%	75.7%
Age (*M/SD*)	36.0 (10.11)	42.11 (10.31)
Master's Degree Training (%)	91.7%	94.6%
Years Providing Psychotherapy (*M/SD*)	4.88 (5.91)	12.58 (6.25)
Years at Organization (*M/SD*)	2.93 (3.48)	8.75 (6.80)
Psychotherapy Theoretical Orientation		
Cognitive-behavioral Therapy	79	28
Family Systems Therapy	6	5
Psychodynamic Therapy	10	0
Humanistic	5	1
Art Therapy	3	1
Solution-focused Therapy	5	1
Play Therapy	5	0
Other	5	1
Client Caseload (*M/SD*)	35.43 (14.01)	N/A
Number of Supervisees (*M/SD*)	N/A	9.50 (3.87)

Table 2. Multilevel Models Examining EBT Implementation Climate

Variable	β	*SE*	*p*	95% CI
Level 1 (Clinician)				
Condition: SFM + BR*	0.01	0.07	0.87	[-0.15, 0.13]
Client Caseload	0.00	0.00	0.72	[-0.005, 0.01]
Years Employed	0.02	0.01	0.15	[-0.01, 0.04]
Baseline EBT Implementation Climate	0.50	0.06	< 0.001	[0.38, 0.63]
Level 2 (Supervisor)				
Self-efficacy Supervising	0.31	0.13	0.02	[0.07, 0.55]
Number of Supervisees	0.02	0.02	0.14	[-0.01, 0.05]
Molar Organizational Climate	0.00	0.33	1.00	[-0.63, 0.61]
Cross-level Interaction				
Molar Organizational Climate × Baseline EBT Implementation Climate	0.39	0.26	0.14	[-0.88, 0.07]

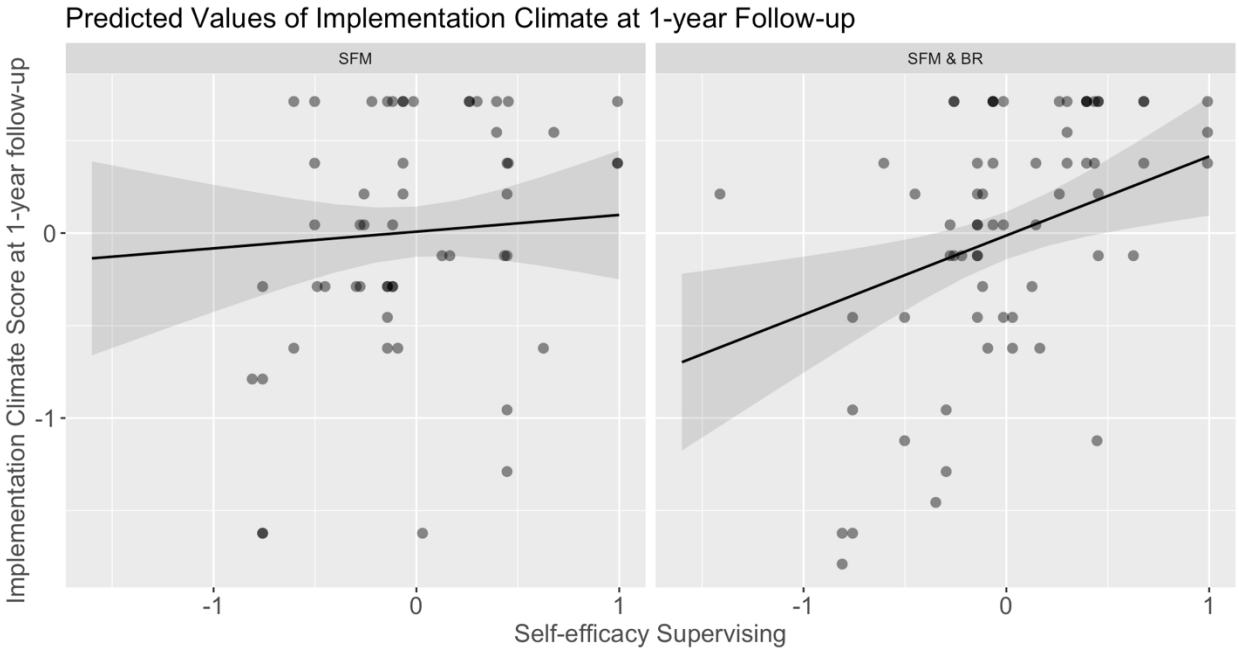
All variables except for condition were grand-mean centered.
*SFM alone was the reference category for condition.

Table 3. Exploratory Multilevel Models Examining EBP Implementation Climate

Variable	β	*SE*	*p*	95% CI
Level 1 (Clinician)				
Condition: SFM + BR*	-0.03	0.07	0.72	[-0.16, 0.11]
Years Employed	0.02	0.01	0.15	[-0.01. 0.04]
Baseline EBP Implementation Climate	0.51	0.06	< 0.001	[0.39, 0.64]
Level 2 (Supervisor)				
Self-efficacy Supervising	0.09	0.16	0.56	[-0.21, 0.40]
Number of Supervisees	0.02	0.02	0.24	[-0.01. 0.05]
Molar Organizational Climate	0.21	0.31	0.51	[-0.38, 0.80]
Interactions				
Condition: SFM + BR* × Self-efficacy Supervising	0.32	0.15	0.03	[0.04, 0.61]

All variables except for condition were grand-mean centered.
*SFM alone was the reference category for condition.

Figure 1. Condition × Self-efficacy in Supervising Interaction Effect



The left panel shows predicted values of EBT implementation climate at one year follow-up in the SFM alone condition. The right panel shows predicted values of EBT implementation climate at one year follow-up in the SFM+BR condition. The steeper slope of the regression line in the right panel (SFM+BR condition) indicates that the effect of supervisors' self-efficacy in supervising on EBT implementation climate is stronger in the SFM+BR condition compared to the SFM alone condition.