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Evaluating the Relationship Between Therapist Negative Beliefs About Exposure Therapy and Delivery Behavior

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Therapist negative beliefs about exposure have been identified as a key contributor to underutilization and suboptimal delivery of exposure—however, supporting evidence is derived from laboratory analogue studies and therapist self-report. Benito and colleagues (2021b) completed a training trial that included rigorous coding of videotaped in-session delivery behavior among a sample of therapists (N = 16) who received workshop training followed by ongoing consultation. The present study is a secondary analysis evaluating the relationship between Therapist Beliefs About Exposure Scale (TBES) scores and actual delivery behavior with anxious children/adolescents in the community. Marginally significant findings suggested that lower pretraining TBES scores (i.e., fewer negative beliefs about exposure) were associated with more frequent exposure usage, and that increased use of anxiety-increasing behaviors was related to greater reduction in therapist negative beliefs about exposure over the course of training. Belief levels did not demonstrate a statistically significant difference based on setting (community mental health vs. private practice). Although future studies with larger samples are needed, current findings extend growing evidence highlighting therapist beliefs about exposure as a potential influence on exposure utilization and delivery quality in real-world settings. Dissemination efforts involving the development of training strategies to promote exposure use in community settings are discussed.

Exposure-based cognitive-behavioral therapy (CBT) is recommended as the first-line treatment for anxiety disorders and obsessive-compulsive disorder (OCD) among children and adolescents (Freeman et al., 2018; Walter et al., 2020). Exposure therapy involves repeatedly approaching anxiety-evoking stimuli while resisting forms of avoidance or escape that attenuate treatment potency. The goal of exposures is to promote inhibitory learning, which involves the development of new safety associations that compete with established beliefs about the dangerousness and intolerability in feared situations. In their optimal form, exposures should be delivered in a prolonged and intense manner that creates a discrepancy between fear expectancy and actual exposure outcomes. Through repeated exposure trials, individuals develop strong safety associations that override their original fear associations in the presence of feared stimuli; consequently, individuals become more confident in their capacity to tolerate once-feared situations.

Despite overwhelming evidence to support its efficacy (Franklin et al., 2015; Freeman et al., 2018; Storch et al., 2009), exposure therapy remains one of the least utilized evidence-based practices in community settings (Reid et al., 2018; Wolitzy-Taylor et al., 2015). Investigation into the delivery of exposure therapy among private practice clinicians revealed that a meager 19.0% implemented in vivo exposure techniques within sessions with anxious youth (Reid et al., 2018); a similar study conducted within an outpatient anxiety clinic found that 10.4% of patients with a principal diagnosis of an anxiety disorder were offered exposure therapy (Wolitzky-Taylor et al., 2015). Generalist mental health practitioners and self-identified anxiety specialists alike were more likely to employ

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techniques such as cognitive restructuring, mindfulness, and relaxation over exposure practices. Furthermore, a meta-analysis consisting of more than 15 studies showed that following participation in targeted exposure therapy training, community-based therapists showed only modest changes in their utilization of exposure techniques with patients, despite their exposure knowledge scores significantly increasing (Trivasse et al., 2020). Notably, when therapists *do* include exposures within the course of anxiety treatment, they are often delivered in a suboptimal format (e.g., short duration, lower intensity, self-guided or imaginal instead of therapist guided, and in vivo per therapist self-report; Reid et al., 2018).

Given the low rate of exposure utilization with anxious youth within real-world, community settings, researchers have begun to investigate the barriers that may contribute to exposure hesitancy or suboptimal delivery. Extant research has identified factors at the organizational and provider level that may impact the feasibility, acceptance, and mastery of exposure techniques within standard clinical practice, including limited effective training opportunities for therapists, and lack of organizational support for or supervision around exposure utilization, among others (Trivasse et al., 2020). On the provider side, clinicians' negative beliefs about exposure safety has been a robust and reliable predictor of exposure utilization (Deacon et al., 2013a; Olatunji et al., 2009; van Minnen et al., 2010) and clinician beliefs about the necessity of safety behavior use in session are significant predictors of self-reported safety behavior use (Meyer et al., 2020). Survey data have indicated that a sizable number of community therapists possess fears that exposures may worsen their patient's anxiety symptoms, cause psychological harm, or lead to premature treatment dropout (Feeny et al., 2003). This is coupled with therapists' own intolerance and anxiety around their patients' experience of distress during exposure completion, which reduces their likelihood of offering and following through on in-session exposure exercises (Pittig et al., 2019; Schare & Wyatt, 2013; Waller & Turner, 2016). Additionally, clinicians' anxiety around exposures is directly associated with a more cautious delivery style, which can attenuate the learning potential derived from exposures (Deacon et al., 2013a & b; Scherr et al., 2015).

Considering the evidence suggesting that therapists' negative beliefs about exposure therapy are related to its underutilization and suboptimal delivery, it is important to have a reliable and valid measure to systematically assess these beliefs. This need led to the development of the Therapist Beliefs About Exposure Scale (TBES), which was created by Deacon and colleagues (2013a). The scale assesses therapist beliefs about the extent to which exposures are unethical, unacceptable, harmful, traumatizing, and inhumane. Higher scores on the scale, indicating stronger negative beliefs, are associated with more aversive reactions to vignettes depicting examples of exposure therapy (Deacon et al., 2013a). Higher scores are also positively correlated with more cautious exposure choices for a hypothetical client with anxiety (Deacon et al., 2013a). Within an experimental study context, therapists who were induced to have negative beliefs about exposure used a more accommodating and cautious exposure style when conducting an exposure with a confederate client (Farrell et al., 2013). These findings speak to the importance of identifying effective and disseminable training methods for modifying therapist negative beliefs about exposure in a meaningful and sustained manner.

Fortunately, recent research has shown that though negative therapist beliefs about exposure are common, they are *not* fixed. In fact, a body of research is forming that demonstrates the malleability of these beliefs when addressed explicitly through trainings or workshops. One notable study found that directly targeting therapist negative beliefs about exposure through a training that combined didactics and experiential exercises successfully reduced therapists' inaccurate perceptions about exposure (Farrell et al., 2016). Promisingly, this enhanced training not only modulated negative beliefs but also changed self-reported therapist exposure delivery behaviors as part of a hypothetical exposure vignette, with therapists reporting less recommendation of safety behaviors or distress reduction strategies posttraining (Farrell et al, 2016). To date, examination of how negative therapist beliefs about exposure may impact exposure utilization and/or suboptimal delivery has relied primarily on analogue scenarios (Farrell et al., 2013), hypothetical case vignettes (Farrell et al., 2016), or therapist self-reported use of exposure in practice (Frank et al., 2020). To our knowledge, the extant literature is lacking a direct examination of how therapist beliefs affect actual in-session delivery behavior among community clinicians working with anxious clients. Evaluating the extent to which tests of beliefs under laboratory conditions translate to typical practice has important implications for the design of training interventions intended to target and augment problematic levels of negative beliefs.

This paper is a secondary analysis of a pilot study of community therapists who completed an intensive training workshop in the delivery of exposure therapy, which included ongoing consultation and videotaped delivery of exposure with real-world clients (Benito

et al., 2021b). The goal of the present study is to explore the relationship between therapist beliefs about exposure and actual exposure delivery behavior in typical practice using a rigorous, micro-analytic coding system to categorize delivery behavior. The therapist sample consisted of providers from community mental health (CMH) and private practice (PP) settings. Given that little is known about differences in barriers to exposure across setting type (e.g., provider beliefs, organizational support), we started by examining whether beliefs significantly differed in CMH versus PP settings. Next, it was hypothesized that greater negative beliefs about exposure reported at pretraining would be associated with less frequent use of anxiety-increasing delivery behaviors (e.g., encouraging client approach), more frequent use of anxiety-reducing behaviors (e.g., providing accommodation), and a lower portion of sessions in which exposure was implemented. It was also hypothesized that change in belief levels over the course of training would be associated with exposure delivery, such that greater reduction in negative beliefs over the course of training (baseline to postconsultation) would be associated with more frequent use of anxiety-increasing delivery behaviors, less frequent use of anxiety-reducing behaviors, and a greater portion of sessions in which exposure was implemented.

Method

Therapist Participants

Sixteen therapist participants across both PP and CMH agencies were enrolled in the study. The average age of the therapist sample was 44.75 years (SD = 9.99) and the majority were female (81.3%), White (56.3%), and non-Hispanic (62.5%). Other reported races included African American (6.3%) and Asian (6.3%); 31.3% declined to report race and 37.5% declined to report ethnicity. Most of the therapist participants were master's-level (n = 10, 62.5%), with the remaining six therapists holding doctoral degrees (37.5%). Licensure types consisted of clinical psychology (31.3%), licensed mental health counselor (31.3%), licensed independent clinical social worker (25.0%), and unlicensed (12.5%). When asked to report their theoretical orientation(s), most therapists named cognitive-behavioral (93.8%), followed by family-systems (56.3%), eclectic (31.3%), humanistic (31.3%), psychodynamic (18.8%), and other (18.8%). The average amount of clinical experience was 16.22 years (SD = 10.29).

Prior to receiving the study training, therapists were asked to report on their current knowledge and overall use of exposure. Half of the therapist participants identified that they had "never" (n = 3) or "rarely" (n = 5) used exposure. The other half of therapist participants reported that they had "sometimes" (n = 5) or "often" (n = 3) used exposure.

Over the course of the study, six therapists withdrew, primarily due to position turnover (n = 4). Other therapists withdrew due to agency closure (n = 1) or scheduling conflicts (n = 1).

Patient Participants

Forty-six child patient participants with an average age of 10.24 years (SD = 3.11) were enrolled in the study after completing an initial eligibility assessment with study staff. Most of the sample identified as female (60.9%), non-Hispanic (92.5%), and White (82.6%), with 17.4% declining to report race. Patient participants had primary diagnoses of OCD (n = 27, 58.7%), separation anxiety disorder (n = 9, 19.6%), social anxiety disorder (n = 6, 13.0%), panic disorder (n = 2, 4.3%), or specific phobia (n = 2, 4.3%). Most of the sample (n = 41, 89.1%) had at least one comorbidity, including specific phobia (50.0%), generalized anxiety disorder (41.3%), separation anxiety disorder (28.3%), social anxiety disorder (28.3%), agoraphobia (23.9%), Tourette/tic syndrome (19.6%), panic disorder (15.2%), attention-deficit/hyperactivity disorder (10.9%), major depressive disorder (8.7%), oppositional defiant disorder (8.7%), and OCD (6.5%).

Training Procedures

All therapist participants were trained to provide family-based exposure therapy with a flexible treatment manual (Freeman & Garcia, 2008). All therapists attended an 8-hour workshop focused on pediatric OCD and anxiety disorders, exposure therapy, and the flexible treatment manual. The workshop was structured to include both didactic and experiential activities (e.g., modeling, role-playing). Following the 8-hour workshop, therapist participants were randomized to one of two training conditions: gold-standard training plus exposure guide (EG) or gold-standard training alone (GS). The second workshop for each group was 4 hours long, and covered components of the flexible treatment manual, including psychoeducation, hierarchy building, exposure, and relapse prevention. In the EG group, the content delivered in the second day of training also included a focus on utilizing the exposure guide—a brief tool developed to aid in exposure delivery by understanding underlying exposure principles. The exposure guide and training procedures for the current study have been discussed in more detail elsewhere (Benito et al., 2021a). Importantly, training groups were designed to include the same content to specifically address therapist negative

beliefs about exposure (e.g., testimonials), and training groups did not demonstrate significantly different TBES scores prior to training and did not differ by any other collected demographic, professional, or clinical service variables at baseline. Although therapists in both groups used similarly high rates of exposure with patients across groups, some posttreatment differences in delivery behavior were reported (e.g., more use of fear-increasing behaviors and fewer fear-decreasing behaviors in the EG group; see Benito et al., 2021b, for further detail).

Treatment and Consultation Procedures

Patient participants received exposure-based CBT. Therapy sessions were videotaped to aid in ongoing consultation for therapist participants from study staff. While all therapists received consultation, the consultation procedures differed by training condition and by therapists' use of exposure. Therapists in the GS group received guidance using an adherence form for basic CBT principles, while therapists in the EG group were encouraged to exhibit certain behaviors during exposures, as described on the exposure guide. Additionally, therapists in both groups were able to enter a maintenance phase of one consultation per month, rather than once per week, if certain mastery criteria were met. The treatment and consultation procedures for the current study have been discussed in additional detail elsewhere (Benito et al., 2021a).

Measures

Therapists

Demographics. We collected information on age, gender, ethnicity, race, and therapeutic practice (e.g., degree type, professional license type, years practicing, primary therapeutic orientation, previous exposure therapy use, and approximate number of primary OCD, primary anxiety, and children/adolescent cases throughout career).

Exposure Process Coding System (EPCS; Benito et al., 2012; see Table 1). EPCS is a microanalytic coding system created to measure therapist, patient, and parent statements and behaviors during exposure therapy. EPCS coding was completed using videotaped therapy sessions and the Noldus Observer (Version XT 11) software, which links specific video time stamps to assigned behavioral codes. Therapist codes were developed to capture statements intended to intensify the exposure (i.e., "anxiety increasing"), maintain the difficulty of the exposure (i.e., "anxiety neutral"), and lessen the difficulty of the exposure (i.e., "anxiety decreasing"). EPCS also includes observer-rated fear ranging from 0 (*no anxiety*) to 5 (*maximum anxiety*). EPCS has shown good interrater reliability and predictive validity with treatment outcome in samples of children and adolescents with OCD (Benito et al., 2012, 2018).

Therapists Beliefs About Exposure Scale (TBES; Deacon et al., 2013a). The 21-item TBES measures therapists' negative beliefs about utilizing exposure therapy. Therapists indicate their agreement with each item on a Likert scale ranging from 0 (*disagree strongly*) to 4 (*agree strongly*). Responses to each item are summed to produce a total score, with higher total scores indicating more negative beliefs about exposure. Therapists completed the TBES before the initial workshop training and at the end of the study (after all study activities were complete, including consultation). The TBES demonstrates excellent psychometric properties (Deacon et al., 2013a). Providers with high TBES scores see exposure as intolerable, unethical, and harmful to the therapeutic relationship (Deacon et al., 2013a & b). These negative beliefs about exposure may prevent providers from utilizing exposure therapy entirely in their practices. A provider with higher TBES scores that does implement exposure is likely to have a more cautious delivery style (i.e., selecting lower items on a client's fear hierarchy, attempting to reduce client's distress, and allowing for use of safety behaviors during an exposure), which is considered suboptimal. For example, this provider might respond to increased client distress and reassurance-seeking questions during an exposure by stating "Everything's going to be okay" or "Why don't we end this exposure a bit early?" In contrast, providers with low TBES scores will likely engage in more intensifying behaviors during an exposure, such as encouraging the client to engage more directly with the feared stimuli (Deacon et al., 2013a & b). For example, this provider might respond to the same reassurance-seeking question from a client by leaning into the uncertainty ("Maybe what your anxiety is saying is true, maybe it's not—who knows!") and encouraging the client to continue to engage ("Let's keep going and see. I know this is hard and I know you can do this").

Patients

Demographics. We collected information on age, sex, ethnicity, race, and psychiatric and medical history.

Mini International Neuropsychiatric Interview for Children and Adolescents (MINI-KID version 7.0.0; Sheehan et al., 1997). The MINI-KID is a short, structured diagnostic interview used to assess DSM-IV and ICD-10 psychiatric disorders in children and adolescents ages 6–17. The MINI-KID was administered by an independent evaluator (IE) to each patient participant to establish inclusionary diagnostic criteria.

Table 1
EPCS-coded Therapist Behaviors in the Context of Exposure for Contamination Fears

Behavior	Definition	Example
Fear Increasing		
Encourage Approach	Encourage patient to approach or mentally focus on exposure; discouraged ritual/ avoidance	"Keep your finger on your shoe. Do not look away or distract yourself"
Intensify the Exposure	Statement to increase patient anxiety	"It's possible you may have stepped on an ant or another small bug on your way into the clinic."
Reduce Parent Accommodation	Discourage parents from accommodating	"This time I want you to hold the shoe with both of your hands, without your mom's help."
Fear Neutral		
Teaching	Provided education about exposure model	"It's really important to fight the urge to ask mom for reassurance when you're worried about how clean your shoes are"
Externalizing	Referred to anxiety as separate from the patient	"You're really showing the Worry Monster who's boss!"
Fear Decreasing		
Changing Anxious Thoughts	Encourage patient to change or replace an anxious thought	"What can you say back to your anxiety to prove it wrong?"
Accommodation	Statement to reduce patient anxiety	"Your shoes look really clean to me."
Unrelated Talk	Statement unrelated to the exposure	"So, tell me what you're doing during school break?"
Encourage Relaxation	Encourage patient to use relaxation techniques	"Take a few deep breaths to calm yourself down."

Analytic Plan

Analyses were conducted using SPSS (Version 26). Prior to analysis, we conducted preliminary inspection of study variables for deviations from homoscedasticity or normality. Sample demographics and other study variables were characterized using descriptive statistics. For Aim 1, we used independent samples *t* tests to compare means by setting (CMH vs. PP) for the following variables: beliefs about exposure (TBES; pretraining and percentage of change from pretraining to postconsultation), exposure use (EPCS; proportion of exposure sessions in which exposure was used), anxiety-increasing behaviors (EPCS; proportion of exposure time during which anxiety-increasing therapist behaviors occurred), therapist anxiety-decreasing behaviors (EPCS; proportion of exposure time during which anxiety-decreasing therapist behaviors occurred), and therapist neutral behaviors (EPCS; proportion of exposure time during which anxiety-neutral behaviors occurred). For Aim 2, we used separate multiple regression analyses to examine the relationship of pretraining beliefs about exposure (TBES) with each therapist delivery outcome (as described under Aim 1): exposure use, anxiety-increasing behaviors, anxiety-decreasing behaviors, and anxiety-neutral behaviors. Given that therapists were part of a larger training study designed to influence delivery behaviors, each model also included training group as a predictor. For Aim 3, we used separate multiple regression analyses to examine each delivery variable (as described under Aim 1) as a predictor of therapist belief change (residualized TBES change score from pretraining to postconsultation).

Missing Data

One therapist did not complete postconsultation measures and was therefore not included in analyses of postconsultation change in beliefs about exposure. All other therapists had complete data. Across all patients, there were a total of 456 sessions expected to include an exposure. Of these, 21% ($n = 97$) of sessions did not include an exposure, and therefore could not be coded. Additionally, 11% ($n = 49$) of exposure sessions were not recorded, 11% ($n = 48$) included exposures conducted out of the office (not recorded

for privacy reasons), and 4% (n = 20) had technological issues (e.g., recording not audible). This resulted in a final sample of N = 242 exposure sessions coded across participants. While not all sessions were captured with the coding system, the research team was able to observe a large majority (74% coded or observed to not include exposure).

Results

Aim 1

There were no significant differences in therapist beliefs about exposure or delivery outcomes by setting (ps > .05). Means and standard deviations by group are presented in Table 2.

Aim 2

When holding the training group constant, there was a marginally significant relationship between pretraining beliefs about exposure and subsequent exposure use, such that higher negative beliefs related to a lower proportion of sessions with exposure (see Table 3). No other relationships approached significance. Full results are presented in Table 2.

Aim 3

When holding the training group constant, there was a marginally significant relationship, suggesting that greater therapist use of anxiety-increasing behaviors predicts larger reductions in negative beliefs about exposure over the course of training and consultation (see Table 4). No other relationships approached significance. Full results are presented in Table 3.

Table 2
Mean *(SD)* of Study Variables by Practice Setting

	Setting	
Variable	CMHA	PP
Beliefs (pre-training)[a]	26.25 (7.67)	29.26 (9.76)
Beliefs (% change)[a]	16.71 (39.66)	28.27 (44.39)
Exposure Use[b]	0.81(0.14)	0.73(0.10)
Anxiety Increasing Behaviors[c]	0.28(0.10)	0.28(0.11)
Anxiety Decreasing Behaviors[c]	0.11(0.06)	0.10(0.08)
Anxiety Neutral Behaviors[c]	0.04(0.04)	0.04(0.03)

Note. CMHA = Community Mental Health Agency; PP = Private Practice; [a]TBES, score range 9-42; [b]Proportion of exposure sessions in which exposure occurred; [c]EPCS; Proportion of time during exposure in which anxiety increasing/decreasing behaviors were observed.

Table 3
Pretraining Beliefs About Exposure Predicting Exposure Delivery Outcomes

Delivery Outcome	Beta	t	p
Exposure Use	−.49	−2.00	.07
Anxiety Increasing Behaviors	.28	1.70	.12
Anxiety Decreasing Behaviors	−.17	−0.74	.47
Anxiety Neutral Behaviors	−.03	−0.12	.91

Note. Multiple regression models included training group as an additional predictor. Anxiety Increasing, Decreasing, and Neutral Behaviors indicate the proportion of time during exposure in which anxiety increasing, decreasing, or neutral behaviors were observed.

Table 4
Delivery Variables Predicting Change in Beliefs About Exposure After Consultation

Delivery Predictor	Beta	t	p
Exposure Use	0.31	1.09	.30
Anxiety Increasing Behaviors	−0.87	−1.96	.07
Anxiety Decreasing Behaviors	−0.08	−0.24	.81
Anxiety Neutral Behaviors	0.28	1.03	.33

Note. Multiple regression models included training group as an additional predictor. Anxiety Increasing, Decreasing, and Neutral Behaviors indicate the proportion of time during exposure in which anxiety increasing, decreasing, or neutral behaviors were observed.

Discussion

The present findings contribute to a growing literature on therapist-level variables associated with the implementation and delivery quality of exposure therapy following training intervention. Previous research has highlighted a relationship between therapist negative beliefs about exposure and its delivery using therapist surveys, contrived lab-based delivery tasks, and measures of hypothetical delivery using standardized case vignettes (Deacon et al., 2013a; Farrell et al., 2016; Frank et al., 2020). Specifically, increased levels of negative beliefs are associated with reduced likelihood of implementing exposure with anxious clients and a reduced likelihood of delivering exposure in the prolonged and intense manner advocated in the literature (Abramowitz et al., 2019). The current study extends these findings by evaluating the relationship between therapist negative beliefs and delivery behavior in a sample of active providers in the community using a rigorous measure of actual delivery behavior in real-world settings.

Participants were practicing therapists in both private practice and CMH settings who completed an

intensive, multiday workshop training followed by ongoing consultation. Results suggest that negative beliefs about exposure—a therapist-level barrier to exposure delivery—was not different in PP versus CMH settings, although consistent with previous studies indicating that therapist self-reported use of exposure was low across contexts (Reid et al., 2018; Wolitzky-Taylor et al., 2015). There was mixed support for the hypothesis that pretraining levels of negative beliefs would be associated with exposure usage and delivery behaviors. A marginally significant relationship between pretraining beliefs scores and usage (i.e., the proportion of exposure sessions that included exposure as intended) emerged, such that higher rates of negative beliefs were associated with less frequent exposure usage. Although this only reached marginal significance in this pilot sample, it is consistent with prior literature showing a link between negative beliefs and exposure use (Deacon et al., 2013a & b; Feeny et al., 2003; Olatunji et al., 2009; van Minnen et al., 2010). Interpretation of this finding using beta weights indicates a medium effect—however, this finding should be interpreted with caution given the small sample size (i.e., beta weights between .10 and .29 = small, .30 and .49 = medium, and > .50 = large; Cohen, 2013; Nieminen, 2022). Although therapist beliefs were marginally associated with exposure use in session more broadly, these beliefs were not associated with specific aspects of therapy delivery behaviors (i.e., anxiety increasing or decreasing behavior). Finally, there was marginal support for the hypothesis that delivery behavior would be associated with change in beliefs over the course of participation. Interpretation of this effect using its beta weight indicates a large effect, but again, the findings should be interpreted with caution given the small sample size. The relationship between delivery behavior and belief change approached statistical significance with regard to anxiety-increasing behaviors, suggesting that more frequent use of anxiety-increasing behaviors predicted greater decreases in negative beliefs over the course of participation. No other categories of delivery behavior demonstrated a relationship with belief change. Although this was a pilot study and findings were of marginal significance, results suggest the possibility that the act of using anxiety-increasing behaviors could facilitate improvement in therapist negative beliefs. This finding suggests a potential mechanism of action to capitalize upon within a training context. Specifically, use of anxiety-increasing behaviors may have functioned as "exposure to exposure" and corrected therapists' anxiety-based reservations about exposure delivery in a process akin to exposure for client anxiety.

Experiential training strategies could leverage these findings by providing in vivo opportunities to test and reevaluate beliefs before implementing exposure in routine practice (Frank et al., 2020; Kemp et al., 2023; see Table 5). For example, therapists may benefit from training activities designed to gain experience with anxiety-increasing behaviors (i.e., "turning up the dial" on exposures to maximize exposure efficacy) to enhance belief change during training. An example of experiential training activity might involve having therapists complete self-exposures targeting fears of being breathless. In this activity, therapists are offered a partially completed hierarchy of interoceptive exposures (e.g., spin in a chair, hold your breath, hold your head in between your legs) and are asked to fill in additional individualized steps to practice hierarchy development. Next, therapists are encouraged to pick a "challenging but doable" starting point (typically breathing through a small straw for 2 minutes, or "overbreathing" to mimic hyperventilation for 1 minute if the workshop is conducted remotely) and articulate their preexposure "anxiety hypothesis" (e.g., "What do you think is going to happen during the exposure?"; "What are you afraid might happen?"). Therapists then complete the self-exposure exercise independently and come together as a group for postprocessing (e.g., "What was your SUDS [subjective units of distress scale]?"; "How high did your SUDS get?"; "Did you habituate?"; "What did you learn?"; "For your next step, are you planning to repeat the same activity or intensify?"). Typically, therapists continue this exercise for three to four more rounds so they can experience some degree of in-session habituation for themselves.

There may be additional ways to draw from exposure processes to enhance belief change during training beyond this example, including the progressive sequencing of client complexity as therapists begin implementing exposure in practice (i.e., start with circumscribed simple phobias, move to more complex social and panic presentations, and eventually graduate to complex constellations of OCD symptoms), similar to crafting a fear hierarchy at the outset of exposure with clients. In addition, providers interested in reducing their negative beliefs about exposure might gain "exposure to exposure" by reflecting on their reservations about exposure and systematically testing these reservations in their work with clients. For example, a therapist may hold the belief that "if a client is feeling anxious during an exposure, then they are likely to be upset with me and not want to come back." This kind of belief may lead the provider to deliver exposures in a more cautious manner and to stop the client's engagement with the feared stimuli before they become "too anxious," which is considered suboptimal

Table 5
Conducting Training as a Form of Exposure (i.e., Exposure to Exposure) – Highlighting Parallel Processes

Therapist Training Component (*Patient Treatment Comparator*)	Explanation of Parallel Processes	Current Study and Future Iterations
WHAT to implement		**HOW** to implement
Pre-training		
Measures of baseline beliefs (*Symptom assessment*)	Identify extent of core fears and associated avoidance	Therapists complete TBES measure before training begins to identify areas of focus during training and consultation
Training Workshop		
Didactic knowledge transfer (*Psychoeducation*)	Provide anxiety and exposure background, corrective information, setting expectations	Slide-based presentation and assigned readings that outline anxiety symptomology, the CBT model of anxiety, and procedural highlights of implementing exposure
Experiential task hierarchy (*Hierarchy of initial analog exposures*)	Selecting and ordering relevant exposures for core fears	Therapists create a hierarchy of relevant self-exposure tasks that would elicit anxiety for them (Social, Contamination, or Panic-related tasks)
Conduct a series of self- and partner-exposures (*Analog exposures*)	Model the process of conducting exposure while building initial gains in self-efficacy and safety learning	Complete at least 3 trials of self-exposure to gradually titrate appropriate difficulty, then practice with a partner taking turns in patient/therapist roles
Consultation		
Delivery with actual patients (*In-vivo exposure*)	Test anxious beliefs in realistic circumstances to gain new safety learning and distress tolerance	Deliver exposure therapy with patients while testing specific anxious beliefs (e.g., use more anxiety increasing behaviors or fewer anxiety decreasing behaviors during delivery and see how it affects your patient's experience and outcome)
Consultation discussion (*Pre- and post-processing of exposure*)	Clarify the purpose, specific activities, feared outcomes beforehand, then review the actual outcomes and revised beliefs afterward	Plan an upcoming exposure session and detail the negative belief to be tested, identify necessary therapist behaviors to fully test the negative belief, take self-ratings of anticipated anxiety, and review the experience afterward to revise the negative belief

exposure delivery. The goal for this provider would be to take an approach-oriented mindset and have the client sit with the feared stimuli (as planned collaboratively beforehand with this client) without facilitating avoidance. The provider can then test whether this experience does in fact impact the therapeutic relationship as believed.

Notable strengths of this paper include examining the relationship between therapist negative beliefs and actual practice behavior in a representative sample of community providers. Another strength is the use of a rigorous, micro-analytic coding system to distill delivery behavior into clinically meaningful categories. However, there are study limitations to consider before generalizing the current findings to training and practice. This is a secondary analysis of a pilot effectiveness trial, which comes with sample size limitations. Given the observed variance in belief levels and delivery behavior, replication and extension of findings with a larger sample with ample power to robustly estimate effects of beliefs on practice behavior is warranted. Only measuring belief levels at the outset (prework-

shop) and end of participation (postworkshop and consultation) places constraints on the inferences that could be drawn regarding the separate effects of workshop and consultation activities. Measuring beliefs at just two time points also prevented insights about the directionality of effects between beliefs and delivery behavior. Replicating results with more frequent beliefs sampling would be ideal, but given the time necessary to complete the TBES measure (21 items), it may be necessary to first validate a briefer version of the TBES that can be easily integrated throughout the course of training to assess the sequencing of belief and practice changes.

The current findings contribute to a growing literature that suggests therapist beliefs about exposure may impact their use of exposure therapy with children and adolescents with anxiety and OCD. Future research can expand on the current findings by assessing for therapist negative beliefs in a larger sample with a tailored measurement strategy to isolate the unique effect of beliefs on exposure usage and delivery behaviors. Further, there is value in exploring optimal methods for targeting and reducing therapist negative beliefs during training. Given that therapist negative beliefs center on concerns about the safety and tolerability of exposure for patients, it is possible to conceptualize therapist negative beliefs as akin to patients' anxious beliefs. It would stand to reason that the same exposure principles shown to reduce patients' anxious beliefs may also serve to reduce therapists' negative beliefs during training—thus, training could be conducted as "exposure to exposure" and draw from well-established exposure principles to optimize reduction in negative beliefs. Training research is needed to design and test interventions that leverage exposure principles to target and reduce negative beliefs.

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