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Exposure Therapy Training and Supervision: Research-Informed Strategies for Addressing Barriers to Adoption and Dissemination

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This paper describes how supervision can be used to address trainee attitudes and beliefs that maybe detrimental to the effectiveness of exposure therapy and, as a byproduct, the ability of the trainee to acquire new clinical skills. We highlight key negative beliefs and attitudes about exposure therapy that are important for supervisors to address with trainees and provide recommendations for how supervisors can identify and address such beliefs in their trainees.

Public Significance Statement
Although exposure therapy is the most effective intervention for anxiety and related disorders, it is frequently underutilized in routine clinical settings. This paper reviews empirically identified clinician barriers to delivering exposure therapy for clinical anxiety, illustrates how such barriers may influence clinical trainees learning exposure therapy, and makes specific research-driven recommendations for how supervisors can effectively (and proactively) address these barriers when training the next generation of mental health professionals in exposure therapy.

Keywords: exposure therapy, supervision, negative attitudes about exposure therapy

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Clinical anxiety is one of the most commonly experienced mental health conditions, with approximately one in five U.S. adults meeting criteria for an anxiety-related disorder in their lifetime (Hasin & Grant, 2015). To date, exposure-based psychotherapy is the most effective intervention for anxiety disorders, leading several major clinical practice guidelines to recommend exposure as a first-line treatment for anxiety disorders such as generalized anxiety disorder and panic disorder (National Institute for Clinical Excellence, 2011) and posttraumatic stress disorder (PTSD; American Psychological Association, 2017; Department of Veterans Affairs & Department of Defense, 2017).

Despite its strong evidence base, rates of exposure therapy adoption and delivery are relatively low (Becker, Zayfert, & Anderson, 2004; van Minnen, Hendriks, & Olff, 2010), even despite large-scale efforts to increase dissemination and implementation of evidence-based treatments across various health care systems (Clark, 2011; Karlin & Cross, 2014). For example, only 9% of the 265,566 Iraq and Afghanistan veterans diagnosed with PTSD receiving care through Veterans Health Affairs completed a course of an evidence-based psychotherapy (Maguen et al., 2019). Low rates of exposure adoption are influenced by individual, practical, and systemic factors (Pittig, Kotter, & Hoyer, 2019), but therapist concerns about the tolerability and safety of exposure appears to be a major reason for its underutilization (Deacon et al., 2013). Because initial reactions to any therapeutic approach begin in training and supervision, supervisor attitudes toward exposure therapy could be instrumental in the development of trainee attitudes and practice (Farrell, Deacon, Dixon, & Lickel, 2013). For example, trainees may be concerned exposure could be damaging to patients to the extent that their supervisors espouse similar views. Even among supervisors who utilize and train in exposure therapies, how they address and offer feedback regarding trainee beliefs about exposure may set the course for how that therapist-in-training is prone to approach exposure therapy in years to come.

In this paper, we first review the literature on negative beliefs and attitudes about exposure therapy and how these therapist-level characteristics function as one of many barriers to the training, implementation, and effectiveness of exposure therapy. We then highlight other trainee factors that may impact the provision of exposure therapy (e.g., such as trainee anxiety sensitivity). In each section, we propose intervention strategies that supervisors can use to address trainees' concerns as they arise during exposure training. These are summarized in Table 1.

Negative Beliefs and Attitudes About Exposure Therapy

Clinicians, including trainees, sometimes elect to use different approaches when treating anxious patients without discussing the option of exposure, often because the clinician mistakenly assumes the patient is too fragile, too anxious, or otherwise inappropriate for exposure treatment (Meyer, Farrell, Kemp, Blakey, & Deacon, 2014). Clinicians may cite psychiatric comorbidity as a reason against delivering exposure, despite numerous studies demonstrating that comorbidities generally do not preclude benefit from exposure (Meyer et al., 2014). Clinicians and clinicians-in-training sometimes think their patients are the exception to empirical findings based on unique patient factors and that these factors the patient exhibits are rule-outs for offering exposure therapy (Cook, Simiola, McCarthy, Ellis, & Wiltsey Stirman, 2018; Feeny, Hembree, & Zoellner, 2003).

Beyond underutilization of exposure therapy, additional problems arise when exposure is not implemented effectively. When a trainee approaches exposure with as much trepidation as some of their patients, they risk conveying a sense that exposure itself is unsafe and that exposure to the most feared elements of an exposure hierarchy is particularly unsafe (e.g., Jacoby & Abramowitz, 2016). Indeed, empirical studies have demonstrated that treatment outcomes are poorer when therapists hold negative attitudes about exposure (Deacon, Lickel, Farrell, Kemp, & Hipol, 2013; Farrell, Deacon, Kemp, Dixon, & Sy, 2013). Common beliefs that may underlie cautious exposure delivery include ideas that exposure cannot be tolerated by most patients, should be paired with anxiety-amelioration strategies, exacerbates anxiety symptoms, and directly harms patients (Deacon et al., 2013). Additionally, it is not uncommon for clinicians (including psychology trainees) to believe they lack a specialized skill set necessary to provide exposure (Zoellner et al., 2011). The notion that exposure is unsafe, however, is, fortunately, mistaken; there is no convincing evidence that the provision or receipt of exposure therapy causes harm to either patients or providers (e.g., Deacon et al., 2013; Olatunji, Deacon, & Abramowitz, 2009).

Deacon et al. (2013) have published multiple studies examining practitioners' attitudes regarding exposure therapy and how they impact provision of exposure. Such studies have led to the development of the Therapist Beliefs about Exposure Scale (TBES), an empirically validated measure that assesses various attitudes and assumptions about exposure therapy. In addition to broader dislike of following manualized treatment protocols (e.g., Addis, Wade, & Hatgis, 1999), the TBES identifies three central negative beliefs/attitudes about exposure therapy that would be important for supervisors to address: concerns about exposure's safety, tolerability, and ethicality. We will address each in turn.

Trainees who espouse concerns about the safety of exposure may anticipate possible iatrogenic outcomes such as physical and/or psychological harm such as a medical emergency during interoceptive exposure exercises for panic (Deacon et al., 2013). Deacon et al. (2013) label the cautious delivery of exposure to minimize potential negative outcomes as a therapist safety behavior. Alternatively, despite evidence to the contrary (Foa, Zoellner, Feeny, Hembree, & Alvarez-Conrad., 2002), therapists can be concerned about its negative psychological toll; for example, that exposure will exacerbate symptoms or cause patients to decompensate (Feeny et al., 2003).

Practitioners also commonly hold negative beliefs about the tolerability of exposure, such that they fear patients will drop out of exposure treatment or refuse it altogether (Deacon et al., 2013). The broad concern that exposure is intolerable is certainly understandable, considering psychology trainees are trained to be empathetic and might even enter the mental health profession precisely to provide comfort and reassurance to patients with clinically significant anxiety. Trainees may fear the intolerability of distress will interfere with therapeutic alliance, which could ultimately attenuate treatment outcome (Deacon et al., 2013).

Some clinicians fear exposure places them at risk of ethical and/or legal violations (Deacon et al., 2013), which for trainees could extend to worry about their supervisors' licenses. The American Psychological Association's (2002) *Ethical Principles of Psy-*

Table 1
Trainee Factors That Impact Exposure Therapy and Supervision-Level Interventions

Trainee factor	Supervision-level intervention
Negative attitudes toward exposure therapy	Assess trainee attitudes at the outset of supervision via TBES
	Discuss TBES responses in normalizing, validating manner; use this as a launching point for further education
	Model by disclosing supervisor's own negative beliefs about exposure therapy and how they were contradicted
	Provide evidence countering concerns of trainee via case presentations, showing therapy video, and conducting simulated interoceptive exposure exercises with trainee
	Underscore, via experiential and didactic means, for the trainee that exposure therapy is a safe, tolerable, and ethical treatment option for patients
Poor distress tolerance	Support trainee in building confidence and comfort with their patients' distress in service of attaining exposure therapy treatment goals
	Share taped sessions of supervisor engaging in exposure therapy for the trainee to review
	Engage in co-therapy with the trainee
	Validate and normalize trainee's desire to reduce patient distress; emphasize importance of acting in patient's best interest and in manner consistent with literature supporting exposure therapy to deliver high-quality exposure
Other concerns about exposure	Directly discuss concerns trainees may have regarding exposure therapy being too rigid and/or not tailorable to individual patient needs
	Provide opportunities for trainees to implement exposure that is adherent to the protocol and individually tailored
	Practice case conceptualization for each patient from within the theory and protocol with the trainee
	Illustrate inherent creativity required to design individually tailored exposures for each patient that are theory and protocol consistent
	Begin these strategies with trainee observation of the supervisor conceptualizing cases and designing exposure, followed by co-therapy with the supervisor, followed by trainee guided case conceptualization and exposure implementation
Affect during exposure	Directly discuss trainee emotional reactions to observing patient distress during exposure therapy
	Point out parallel process for the trainee and the patient (i.e., it may feel like a leap of faith to engage in exposure therapy on an emotional level in spite of the empirical evidence base)
	Normalize trainee emotional reactions to patient affect during exposure therapy
	Support the trainee in development of the fortitude to continue exposure therapy in spite of feelings or thoughts that they should discontinue exposure prematurely and/or offer the patient safety behaviors
	Use a social learning theory frame in supervision that invites the trainee to engage in a functional analysis of patient affect, behavior, and environmental factors as well as trainee affect, behavior, and environmental factors for trainees to understand how contextual factors impact their clinical decision making
	Frame for the trainee that managing emotional behaviors in themselves is a learned behavior that requires practice and one that can and should be addressed in supervision
	Utilize direct observation via co-therapy and tape review of therapy sessions to support trainee development of self-awareness of their emotional and cognitive reactions to patient affect
	Practice case conceptualization for each patient from within the theory with the trainee to understand how avoidance is being reinforced by the patient's environment (which may include the trainee at times)

Note. TBES = Therapist Beliefs about Exposure Scale.

chologists and Code of Conduct intersects with this class of exposure-related concerns in its guiding principles (Principle A: beneficence and nonmaleficence; psychologists should "take care to do no harm" and "safeguard the welfare and rights" of their patients) as well as ethical standards (Section 3.04: "Psychologists take reasonable steps to avoid harming their patients/clients" and "minimize harm where it is foreseeable and unavoidable"). Accordingly, many well-intentioned trainees may worry that deliberately inducing psychological and/or physiological discomfort in patients during exposure therapy violates these ethical guidelines. Yet it is important to bear in mind that it might be unethical, in the absence of empirically supported contraindications or patient refusal, not to deliver exposure therapy to patients presenting with clinical anxiety.

A chief impact of negative attitudes on exposure therapy is when the trainees deliver exposure at a low intensity that attenuates patients' long-term symptom reduction (Deacon et al., 2013; Farrell et al., 2013). Such empirically identified tentative therapist behaviors include: designing less ambitious hierarchies that do not challenge patients to face their greatest fears, making frequent efforts to ameliorate the patient's (and perhaps their own) distress, permitting greater safety behavior usage (e.g., deep breathing), not challenging the patient to conduct tasks highest on their hierarchies, conducting imaginal exposures in cases in which in vivo exposure is more indicated, early termination of therapy, and frequently apologizing to patients for causing distress (Farrell et al., 2013; Reid et al., 2017). Introducing anxiety-reducing behaviors into exposure exercises counters best practice, in that unnecessarily cautious exposure delivery prevents patients from learning that distress is safe, tolerable, and naturally time limited. If considered within an inhibitory learning framework of exposure (Craske, Treanor, Conway, Zbozinek, & Vervliet, 2014), tentative exposure delivery practices could interfere with long-term exposure outcome because these behaviors attenuate the potential discrepancy between what a patient thinks will occur during an exposure (i.e., catastrophe) and what actually occurs during an exposure (i.e., no catastrophe; Blakey & Abramowitz, 2016). Translational research suggests this violation (or mismatch) of expectancies is necessary to optimize the type of safety learning thought to occur during exposure (Craske et al., 2014). Therefore,

although cautious behaviors such as incorporating anxiety-reduction strategies during exposure tasks might make exposures easier in the moment, they are counterproductive for patients in the long-term.

Supervision-Level Strategies for Addressing Negative Attitudes

In their intervention pairing didactic methods with experiential exercises, Farrell, Kemp, Blakey, Meyer, and Deacon (2016) developed an enhanced training (ET) method that directly addressed exposure therapy attitudes and compared it with a standard training condition. In ET, trainers addressed exposure therapy attitudes in several novel ways: reviewing common concerns and the corresponding lack of evidence supporting these concerns (i.e., a sort of myth-busting exercise), discussing case presentations, showing video-recorded patient testimonials, and conducting a simulated interoceptive exposure exercise with attendee participants. Farrell et al. (2016) reported that ET participants, relative to standard training participants, demonstrated significantly greater reductions in negative beliefs/attitudes about exposure from before to after training and superior self-reported exposure delivery behaviors.

In light of these findings, we recommend supervisors integrate didactic and experiential learning activities when training novice exposure therapists. We also recommend supervisors have a preliminary discussion about their trainees' attitudes regarding exposure at the outset of supervision. One useful approach is to couch such discussions in a normalizing way, framing as commonplace for novice exposure therapists to hold negative implicit attitudes that need ferreting out. Administering and reviewing the TBES (Deacon et al., 2013) could also serve as a springboard for productive, educative discussions about the true risks of exposure therapy. We have found that modeling works well: Supervisors can speak to how they were pleasantly surprised in the past when their own negative beliefs about exposure were contradicted in practice when they were new to exposure therapy. This strategic stance and self-disclosure can create a supportive and collegial atmosphere of learning that normalizes having, identifying, and collaboratively modifying beliefs that could undermine exposure delivery.

Exposure supervisors benefit from confidently framing exposure as a method that does not inherently put patients in harm's way. All exposure targets would be considered reasonably safe by most people without clinical anxiety. Exposure therapy is designed to help patients learn to tolerate acceptable levels of risk for the sake of increasing quality of life. Thus, we believe it is important for exposure supervisors to help their trainees understand that when conducted carefully and ethically, the potential negative consequences of exposure are remarkably low and that the potential therapeutic benefit of conducting prolonged and intense exposure is remarkably high (e.g., Olatunji, Cisler, & Deacon, 2010). Readers interested in a comprehensive guide to ensuring maximal patient safety during exposure are encouraged to review work by Olatunji et al. (2009).

Consider the following vignette, which illustrates how a supervisor might address negative attitudes about exposure therapy with trainees. Please note that these vignettes are amalgams of real supervision experiences but changed sufficiently to protect the identities of the trainees.

At the beginning of training in PE, Dr. X has trainees complete the TBES, which she frames as a great training opportunity to assess one's attitudes toward exposure and a platform for training in offering effective exposure therapy.

Dr X: Thank you for completing this. I always find the TBES is a great way to become aware of our own attitudes toward exposure therapy and that it often allows for some good discussion on exposure. I see that you endorsed the items related to concerns that trauma imaginal exposures may retraumatize the patient and may vicariously traumatize the therapist. This seems like an important discussion point. Can you share more about your concerns?

Trainee Y: Sure. I know the research shows that overall imaginal exposure doesn't worsen patients, but what if they drop out early in the middle of trauma work? I'm worried I could make that person worse off in that case.

Dr. X: That is such a natural concern. We all worry about this from time to time when doing exposure. And one of the things I have found over time is that with each success case I see, I have more counterweight to that worry.

Trainee Y: I can see that. I am sure exposure works really well for most people, I just worry about how upset I may make someone.

Dr. X: Absolutely. And you will definitely find yourself in the middle of an imaginal exposure at times wondering, "What am I doing to this poor person?" And I think you will find in time that by far, the majority of the people who seem most upset during early imaginals are the ones who do really well later.

Trainee Y: That's reassuring. I need to keep in mind that a patient being really upset in the short term but recovering is better than the long-term effects of PTSD.

Dr. X: Precisely.

Additional Therapist Factors Affecting Exposure Therapy Delivery

Trainees' own personal relation with aversive internal experiences (e.g., thoughts, emotions, sensations) may also influence the way they implement exposure. One such trainee-level factor is anxiety sensitivity, which refers to the fear of anxious arousal (Harned, Dimeff, Woodcock, & Contreras, 2013). This fear is engendered by mistaken beliefs about the meaning or implications of anxious arousal. Specifically, trainees who themselves interpret anxiety as a signal of danger or catastrophe may consequently encourage patients to engage in strategies to reduce distress and/or arousal. Indeed, previous studies have found that therapists' own anxiety sensitivity is not only associated with excluding patients from exposure therapy but also predictive of less clinical profi-

ciency in offering exposure therapy following exposure therapy training (Harned et al., 2013; Meyer et al., 2014).

Another trainee-level factor that would be important for supervisors to consider is experiential avoidance, or the unwillingness to experience unpleasant internal states (Hayes et al., 2004). This is because trainees who avoid or otherwise resist uncomfortable emotions, thoughts, and/or sensations may shy away from therapy modalities that explicitly aim to induce psychological distress and/or discomfort, such as exposure therapy. Consistent with this possibility, one previous study found that cognitive-behavioral therapy–trained therapists with greater experiential avoidance were less likely to recommend exposure therapy for a hypothetical patient with obsessive-compulsive disorder than were therapists reporting lower experiential avoidance (Scherr, Herbert, & Forman, 2015). Although research on the influence of trainee-level psychosocial variables on exposure delivery is sparse, available evidence suggests it would be critical for supervisors to be mindful of how trainees interpret and relate to their own emotional and physiological experiences likely to arise during a course of exposure therapy.

Supervision-level interventions for managing patient and therapist affect during exposure. In our supervisory experience, one of the more common reactions many trainees have when beginning their exposure therapy training is to struggle tolerating the evident distress their patients are experiencing during exposure exercises. In fact, previous research has found that many therapists evidence greater anxiety than do their patients during intensive exposure on subjective as well as physiological measures (Schumacher et al., 2015). One of the more important roles of the supervisor in exposure therapy training is to help trainees manage their own emotional reactions and continue to deliver treatment with fidelity. Effective supervisors acknowledge and discuss the dual process in play here: The trainee is presenting a rationale and the solid research for why exposure works and asking their patients to take a leap of faith, and the supervisor is presenting rationales and research to trainees and asking them to do the same.

Within an exposure therapy session, the trainee is influenced by its context of social interactions, emotions, cognitions, and behaviors (see Kimmerling, Zeiss, & Zeiss, 2000). Under these powerful influences, trainee clinical decision making can be counter to the purposes of the protocol. Trainees commonly make moment-to-moment decisions during therapy that go against the protocol but are consistent with felt emotion in the therapy room (Schulte & Eifert, 2002). Follette and Batten (2000) contend that patients can often sense therapists' emotional reactions during sessions and may hold back from fully engaging in exposure if they sense that the therapist is uncomfortable with strong affect in the room. Supervision can play a critical role in helping trainees better observe their reactions in the moment, recognize the interplay of the patient's behavior and the effect that has on the trainee's emotions, thoughts, physiological reactions and subsequent therapist behaviors being emitted, and make effective therapeutic choices about which behaviors to emit. Supervisors can begin this work by normalizing trainees' emotional reactions to their patients' distress. Then supervisors can help trainees recognize the difference between wanting to end an exposure prematurely and wanting to go forward anyway for the ultimate benefit of the patient. We often say that an exposure therapist needs to have the courage of his or her convictions, in other words, to have the courage in the moment to help guide the patient to having a mastery experience rather than attempting to ameliorate distress in the moment.

It is incumbent upon exposure supervisors to recognize their roles as both teachers and evaluators. Trainees may not always be the best observers and reporters of their own behavior, especially in moments when affect is high in the room. Furthermore, trainees are quite aware that they are being evaluated by the supervisor as they discuss how they managed their own emotional reactions in the room. In our experience, and based on feedback we have received from our own trainees, we have found that when we do early supervision work to normalize and openly discuss emotional reactions and tendencies to modulate exposures to ease distress, our trainees are more likely to build their self-observation skills and learn to manage strong affect. In this regard, it is crucial for the supervisor to build a nonjudgmental learning environment for trainees. Kimmerling et al. (2000) suggest that supervisors provide a social learning theory frame for supervision, which conceptualizes trainee emotional responses as a function of interactions between the trainee, patient, and environment. The trainee can use this frame in supervision discussions to better understand patient affect, behavior, and environmental factors as well as their own affect, behavior, and environment factors.

Furthermore, supervisors should address strategies for helping trainees manage their own distress during exposure. As stated earlier, we strongly encourage the normalization of trainee reactions to their patients' emotional distress. It is reasonable to be concerned about the visible distress patients are feeling and wonder whether exposure is the best therapeutic course of action. Just as exposure helps patients learn their anxiety is tolerable and not dangerous, effective exposure supervisors help trainees learn this concept as well. Vital to this learning is the experiential context in which the patient and trainee learn first hand that exposures at the top of their fear hierarchies are not only safe but also tolerable. The dual-process model here is critical. As trainees begin to accrue success experiences with patients confronting their worst fears and demonstrating mastery, the trainee therapist herself/himself begins to build mastery. The supervisor acts as a bridge to this process.

The supervision process could benefit from opportunities for the trainee to observe the supervisor in action and tolerating distress. There are several ways to achieve this: supervisor's taping their own sessions to show, doing individual cases together, and doing an exposure-based group together. It is important for the supervisor to explicitly address the distress demonstrated by the patient and make distress tolerance a focal discussion. Supervisors can use these as a means of modeling how to both acknowledge the impact a patient's distress can have on us and to act in the therapeutic best interests of that patient by sticking with the exposure. Trainees come to feel validated for having those feelings and impulses to quell anxiety, which helps them learn to better tolerate these experiences in the moment.

Much like their patients, trainees are often attempted to avoid supervisory experiences they predict to be uncomfortable. They may not disclose aspects of sessions that may evoke constructive feedback. Often what is said that happened in session is very different from what actually happened. Therefore, we strongly recommend exposure supervisors utilize direct observation and/or recordings of session content to guide supervision. Most importantly, supervisors can glean very important information about

trainee affect and toleration of patient affect from observation. With or without awareness, trainees may be routinely helping patients avoid the hardest elements of specific exposures. Collusion with patient avoidance is often subtle and yet detrimental to success. Another benefit of direct observation and recording review is that it helps the trainee understand how exposure works from the perspective of the recipient because being observed by your supervisor is certainly a form of exposure therapy. To the extent the supervisor is able to use observation as an effective exposure, the trainee will be able to challenge problematic beliefs about exposure and understand how it works first hand.

Supervision may also be able to effectively help those trainees higher in anxiety sensitivity or experiential avoidance. Supervisors can help trainees better recognize and regulate their own reactions to aversive internal states by gaining experience successfully delivering exposure therapy while experiencing their own discomfort. With awareness of the values that brought them to advance clinical training, trainees can learn to feel one way and behave another. In repeated attempts to strive toward values-concordant behavior, their aversive internal states may subside. One of the strongest skills a psychologist-in-training can learn is self-reflection and research supports that self-reflection is predictive of greater clinical skills in cognitive-behavioral therapists (Bennett-Levy et al., 2001).

Moreover, supervision provides a space for trainees to learn case conceptualization skills (Friedberg, Gorman, & Beidel, 2009), which are critical to the process of good clinical work and helps obviate the impact of strong affect in session. For example, if a patient routinely has difficulties engaging is a particular kind of exposure, the trainee and supervisor can explore why he or she is having such difficulty. Is there some specific type of fear process in play for that particular patient and what function does pulling back from the exposure serve? Has the patient's avoidance behavior been reinforced when the therapist ends an exposure early? Case conceptualization skills provide a theoretical framework for understanding the constellations of thoughts, emotions, behaviors, and physiological reactions occurring in particular contexts. Supervision focused on helping trainees better understand their own emotional reactions in session, as well as the functions those constellations of processes play in the patient's life, will lead to optimum exposure therapy application.

The following vignette illustrates how a supervisor may address elevated trainee affect associated with delivering exposure therapy to patients. The case is a patient who is not progressing in exposure for panic disorder. The protocol was focused on interoceptive exposure at that juncture. In this supervision meeting, the trainee and supervisor are viewing a recording of the last session.

Trainee Y: So here is the part when he is doing his straw breathing and it gets hard.

Dr X: Looks like he is starting to have a fair amount of panic. How were you reacting?

Trainee Y: I was starting to get worried that he would have a full panic attack and maybe leave.

Dr X: Oh yes, I have definitely had that worry right there before.

(In session, trainee Y tells the patient he can stop and use deep breathing.)

Dr X: Okay, tell me about what is happening right there.

Trainee Y: Well, he made it to about 25 s, not the full minute, and I felt like I had to do something there.

Dr. X: Had to do what?

Trainee Y: I felt like I had to help him not have a full panic. I guess I felt a little panicky, like maybe he would get up and leave. Maybe even quit altogether.

Dr. X: Yes, I have definitely been there, too. And from your case conceptualization, what do you think he is learning in the exposure?

Trainee Y: I think he is learning that there is a place where panic can be too much, in other words, that panic can ultimately be dangerous if it gets too intense. And this matches with his reports on homework completion—He often ends an exposure too soon over the same worries.

Dr. X: Great insight. And so, given this conceptualization, how do you want to approach this next time?

Trainee Y: I think I should validate his hard work and then address the issue of safety behaviors and how the help in the moment but ultimately prevent progress in exposure. Then propose doing our in-session exposures without safety behaviors.

At the point when the patient would begin to experience panic sensations during the exposure, the trainee would allow the patient to stop the exposure and practice breathing. The trainee articulated a concern that the panic sensations may turn into a panic attack and then she would not know what to do. The supervisor normalized these worries and then further probed about why the trainee would need to do anything. The trainee voiced concerns that the patient would leave and/or quit therapy. The trainee had good insight into how this provision of a safety behavior could be, at least one of, the impeding factors in progress and that lack of progress may be more likely to lead to drop out than having a panic attack in session. At subsequent sessions, the trainee was able to help the patient complete interoceptive exercises without safety behaviors and, although the patient experienced intense panic sensations, this patient reported learning that panic feels terrible but is not dangerous.

Addressing Other Trainee Concerns in Supervision

Supervisors are in a unique position to address concerns among trainees that exposure is too rote and rigid and not tailorable to the needs of the individual patient (Feeny at al., 2003). Research has demonstrated that therapists will contradict their training in exposure therapy by modifying evidence-based protocols in ways that are not supported by research because of evaluating the protocol as inadequate for unique patient characteristics. (Cook et al., 2018). Perhaps one of the best supervision approaches to this concern is

experiencing first hand how exposure is adaptable and, in fact, often the only treatment many patients will need. Moreover, trainees can come to see that exposure is very creative and highly adaptable when they implement exposure by the book. How do you devise an exposure for a patient with obsessive-compulsive disorder who fears she has hit someone with her car but only when she feels a bump under the wheel? What about the combat veteran with PTSD who is easily startled by loud, random noises? How do you reproduce these situations reliably in a safe, effective exposure exercise? There is endless creativity in exposure work for trainees to explore. The effective exposure supervisor helps create a learning environment in which the trainee learns to use her/his creativity when designing and implementing exposure. As in the cases of most effective teaching, beginning the process by modeling and moving toward graduated independence (leads toward high levels of trainee competence by the end of training).

Summary of Recommendations for Supervisors

By definition, patients with clinical anxiety experience elevated levels of anxiety on a routine basis, be it spontaneously generated or triggered despite attempts to avoid anxiety-provoking cues. Exposure therapies encourage patients to confront reasonably safe but avoided stimuli that are relevant to patients' lives to learn that their anxiety is misplaced, exaggerated, and/or unhelpful. Despite substantial empirical evidence demonstrating the effectiveness of exposure therapies, these interventions are grossly underutilized. Of the many barriers that obstruct the successful implementation of exposure therapies, supervisors can address the problem of insufficient training. We believe insufficient training in exposure therapies is partly the result of trainee's unchecked negative attitudes and beliefs about exposure therapies. Furthermore, we believe it is reasonable for supervisors to anticipate and acknowledge each trainee's ambivalence about these interventions. Because exposure treatments deliberately induce anxiety among patients for therapeutic purpose, some trainees may be hesitant to deliver a treatment that seems to contradict their initial assumptions of what is therapeutic. In this paper, we have discussed how trainee attitudes and beliefs can be detrimental to the effectiveness of exposure therapy and, as a byproduct, the ability of the trainee to acquire new clinical skills. Many trainees do not enter supervision with unbridled enthusiasm for exposures and they cannot be told simply to believe exposure is safe, effective, and ethical. Rather, positive attitudes and beliefs are acquired through mentorship and direct experience.

We highlighted three central negative beliefs and attitudes about exposure therapy that are be important for supervisors to address with trainees: (a) concerns about the safety of exposures, (b) concerns about the tolerability of exposures, and (c) concerns about the ethicality of exposures. We recommend that supervisors investigate the presence of these beliefs, or variations thereof, using a combination of discussion and administration of the TBES. After identifying and normalizing these beliefs, we recommend a combination of didactic and experiential learning to correct these beliefs and allow the trainee to test new beliefs. Particularly helpful supervision strategies are reviewing availability of evidence that support concerns (i.e., myth busting), discussing case presentations, showing video-recorded patient testimonials, and conducting a simulated interoceptive exposure exercise with attendee participants. Additionally, when designing learning experiences, supervisors need to attend to and address trainee-level factors such as anxiety sensitivity and experiential avoidance. Until the trainee understands that distress is safe, tolerable, time limited, and necessary for adaptive learning, the supervisor cannot expect the trainee to help patients come to the same conclusions.

Ultimately, there are two serious potential impacts of negative trainee attitudes and beliefs about exposure: (a) trainees opting to not offer exposure therapy to their patients and (b) trainees offering exposure in a suboptimal manner. Rather than waiting for these outcomes during clinical training, we encourage supervisors to adopt a proactive approach in assuming their trainees hold problematic attitudes and beliefs and to normalize these as part of the experiential learning that is exposure therapy.

Recommendations for research

While the literature on therapist attitudes and affect tolerance in exposure therapy is robust, there is a paucity of research focused on supervisor attitudes about exposure therapy and how this impacts clinical training. This suggests a potential useful area for future research. Initially, descriptive and attitudinal research aimed at studying the extent of supervisor attitudes and how those influence training would be useful. If that research suggests that supervisor attitudes are negatively impacting exposure training and trainees' delivery of exposure, subsequent research could examine the relative effects of various supervisor-level interventions. For example, replicating previous training model comparison studies (Farrell et al., 2016) to target samples of novice supervisors instead on trainees and tracking changes in both the supervisor and trainees' TBES scores over the course of supervised exposure therapy cases. Alternatively, a study could adapt the Progressive Cascading Model (Reid et al., 2017) in which experienced supervisors are training newer supervisors to provide training to senior level trainees who train newer trainees. This could have the further benefit of senior trainees being more prepared to be effective supervisors as they advance to that level in their careers. Such future research has the potential to not only contribute to the overall literate on training and education in psychological practice but also extend the reach and impact of evidence-based treatments for one of the most common mental health conditions.

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