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# Integrative approach for the treatment of PTSD in 9/11 first responders: Three core techniques

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#### **Abstract**

We describe an integrative psychotherapy for first responders to the September 11, 2001 terrorist attack, including those who continue to be psychologically impacted by these events, most of whom meet criteria for a diagnosis of PTSD. Three core techniques utilized in this treatment are described: (a) an emphasis on meaning making, particularly regarding the traumatic event; (b) focus on the most affect-laden components of the traumatic exposure; and (c) identifying and challenging the implicit strategies used by individuals to avoid discussion of components of their traumatic memories and the attendant negative affect. For each intervention, a theoretical rationale and the presumed mechanism of operation are presented. We discuss the clinical and research implications of this intervention.

# **Keywords**

integrative psychotherapy; PTSD; first responders; meaning making; defensive operation

More than 60,000 individuals worked as part of the rescue and recovery effort in the aftermath of the terrorist attacks of September 11, 2001 (9/11; CDC, 2012), including volunteers with no prior training and experienced police officers and firefighters. Although a majority of first responders subsequently did not meet criteria for psychiatric diagnoses, nine years later, the cumulative incidence of probable posttraumatic stress disorder (PTSD) in

exposed individuals was 9.3% for New York City police officers and 31.9% non-police rescue and recovery workers (Wisnivesky, Teitelbaum, Todd, Bofetta, Cran, et al., 2011).

To evaluate treatment approaches used with this population, a systematic review of PTSD treatments (Haugen, Evces, & Weiss, 2012) was conducted. Only two psychosocial treatments, one of which is integrative, had been studied via randomized trials. Both showed significant, large treatment effects (h = 0.92; d = 1.37; Gersons, Carlier, Lamberts, & Van der Kolk, 2000; Difede, Malta, Best, Henn-Haase, Metzler et al., 2007). The authors concluded that the literature was too sparse to provide evidence-based treatment recommendations for first responders. Nevertheless, treatments that integrate psychodynamic and cognitive-behavioral treatment (CBT) approaches appear to show promise with this population.

Though characteristics of responders such as "hardiness," and independence (Moran & Colless, 1995) may represent factors that protect against the development of PTSD, they may also serve as barriers to assessment, referral, and treatment, if PTSD does develop. As well, first responders may find the directive, active stance that characterizes typical CBT interventions more congruent with such characteristics (e.g., Difede, Roberts, Jayasinghe, & Leck, 2006) when compared to a less directive psychodynamic approach.

In this article, we give a brief overview of an integrative treatment approach that has been tailored to this responder population and describe three specific techniques key to the efficacy of the treatment: (a) a focus on "meaning making;" (b) an emphasis on the most affect laden elements of the traumatic memories; and (c) an examination of automatic strategies that individuals use to avoid thinking about the trauma. A brief discussion of clinical implications and areas for further research related to these interventions closes the paper. Though each of these interventions will be described independently, in practice they are often utilized in conjunction with one another. It is important to note that this paper does not include a comprehensive description of this treatment: elements such as consideration of transference, countertransference, and the therapeutic alliance are central to psychodynamically-informed trauma-focused treatments but are not discussed here.

#### **Treatment Overview**

The treatment approach is a once weekly, integrative psychosocial intervention. It relies on a psychodynamic metapsychology but includes a more active therapeutic stance than most psychodynamic therapies and strategic use of select CBT interventions. The primary goal is to assist individuals in coming to terms with the unique, idiosyncratic meaning of the event to which they have been exposed (Weiss, 2006).

A brief introductory and evaluation phase precedes this treatment, during which a combination of measures from patient- and therapist-perspectives are administered within a Therapeutic Model of Assessment (TMA; Finn & Tonsager, 1997) framework aimed at developing a therapeutic bond and engaging in collaborative goal-setting. Initial assessment focuses on establishing psychiatric diagnoses as well as the beginning of a psychodynamic formulation. Individuals are referred out for more intensive and/or targeted treatment when they are actively suicidal or homicidal, engaging in self-injurious behavior, acutely

psychotic, or meet criteria for current alcohol or substance dependence. Patients are accepted for treatment in the clinic when it is established that they are 9/11 rescue and recovery workers who are substantially likely to have a psychological condition related to their exposure to the events of September 11th or the subsequent rescue and recovery effort.

Within the first three to four therapy sessions, the clinician develops a more complex formulation including the current phase of the individual's response to ongoing stressors, symptoms and presenting problems, and the relation of current events to those in the past (See Horowitz, 1997). The Shedler-Westen Assessment Procedure (e.g., SWAP-II; Westen & Shedler, 2007), a 200-item Q-sort procedure, is used to assess core conflicts regarding a patient's wishes, fears and motivations; psychological resources for adapting to both internal and external demands; and capacity for engaging in intimate relationships (See Westen, Gabbard, & Blagov, 1986, for example). A treatment plan is then developed outlining therapeutic goals and strategies, and may include referrals for psychopharmocology or other concurrent treatments (e.g. group or couples therapy) that are integrated with individual therapy through collaboration among treatment providers. Importantly, the formulation and treatment plan are flexible and intended to be modified based on the clinician's experiences with the patient and the patient's status over the course of treatment.

Treatment shifts towards termination when the patient is able to talk about their traumatic experience as integrated into their overall life narrative and in connection with their past and their internal world more generally. In Stern's words (1985), they can tell their whole story without distress or censoring. At this time, patients' PTSD symptoms have declined, and the treatment can focus on what the loss of the therapeutic relationship will mean to the patient, culminating in termination of the treatment.

# **Intervention 1: Meaning Making**

# **Rationale and Proposed Mechanisms of Change**

A central component of the treatment involves engaging the patient in meaning making regarding their traumatic experience. All individuals have global meanings: broad schemas of what they expect in the world, their relationships, and of themselves (Park, 2012), which arise from their history (e.g., Siqueland, Kendall, & Steinberg, 1996) and are shaped by their personality style (e.g., Veen & Arntz, 2000). Individuals appraise and assign meaning to new situations, but in the context of trauma, resulting situational meanings often conflict with preexisting global meanings. Where discrepancies occur, distress follows, motivating individuals' (often automatic) efforts to restore congruence thereby alleviating the distress (See Park, 2010). Symptoms of PTSD may arise when these idiosyncratic meanings are either too incongruous with global meanings for the individual to reconcile independently or when they motivate a negative change in global meanings, which leads to a recursive cycle of intrusive and avoidance symptoms (Horowitz, 1997). Psychotherapy that focuses on meaning making and elaboration of the trauma can relieve distress in two ways: first, by changing the global meaning structures to accommodate the reality of the traumatic event (e.g. Ehlers & Clark, 2000) and second, assimilating the meaning of the trauma into their global meaning structures (Horowitz, 1997).

#### How Meaning Making is Emphasized Throughout Treatment

The clinician begins listening for opportunities to encourage the patient to engage in meaning making as soon as clinical contact is initiated using clarifying techniques. Early in treatment, patients may avoid making meaning altogether (e.g., "I was just doing my job.") or provide self-evident descriptions (e.g., "Wouldn't anyone feel that way?"). In order to facilitate meaning making, the clinician should focus attention on what exactly about the trauma was upsetting. In order to address the numerous layers of meaning behind a difficult event, it may be useful to repeatedly ask why some element was impactful, even though it appears self-evident. It is also important to ask what the event means for the way the individual views him or herself, in addition to his or her relationships and the world around them. Asking whether specific elements of the trauma brought up any thoughts or feelings the individual has experienced in the past facilitates a deeper understanding of the sources of their reactions. Although on the surface the answers to these questions may appear simple, obvious, or both, in our experience this is rarely the case. Over time, as patients gain clarity in terms of what about the trauma was difficult for them and why, they often need fewer therapeutic interventions and are increasingly able to understand the genesis of the narrative.

# Clinical Example of Meaning Making<sup>1,2</sup>

Patient (Pt): I'm coming from a world where I had to be watchful and I was aware and now [I'm] unaware and I don't have to be as watchful. It's like two ends of the spectrum and I guess I'm still being affected by it. [Patient reflecting on how 9/11 and psychotherapy have affected his view of himself and the world]

Therapist (Th): So, to make that a little clearer, you come from a world where...

Pt: I'm getting these notifications where I had to be watchful, aware, I knew what was happening, that's one end...I'm constantly feeling harassed - you saw it - too like, nothing. No awareness. Nothing. So it's like two opposite ends.

Th: If I'm understanding you right, being watchful...being suspicious, was really difficult for you, but in some way maybe-

Pt: -I knew what was happening.

Th: ...you could protect yourself. [Clinician helps the Patient to elaborate meaning]

Pt: Now [in the nightmare] I was like, it's like, unknown.

Th: Which is what you were like before 9/11-

Pt: Yeah!

Th: -from your description.

<sup>&</sup>lt;sup>1</sup>Informed consent was obtained from patient and material has been disguised in all clinical examples by removing identifying

information such as gender and occupational details.

All clinical excerpts are from a single psychotherapy session in which the patient has been describing a recent nightmare concerning his/her experience as a first responder on 9/11.

Pt: Now [during psychotherapy] I'm more relaxed. I enjoy my weekends. You know!... That's normal, you know. That should be a normal thing. That's what it was like before 9/11. But the normal...it's not...for me, anyways, going back to normal has it's own problems. [Patient considers multiple meanings regarding how treatment has impacted his experience of safety]

Th: Like what?

Pt: Some of the dreams of me dying in my house, I never had that before. Where I'm safe, I don't feel safe. The normal became abnormal. I've been like this for so long, I don't know what normal is anymore. I know this is abnormal, trust me. I'm almost acting like I want this [the normal] back, but I don't. I'm not acting that way, mentally or emotionally. I still have attachments. [Patient expresses loss in connection with pre-9/11 experience of self and the world]

Th: You can't not know what you know? [Facilitates Patient's engagement with new meanings]

Pt: I'm trying to deal with that.

# Intervention 2: Following the Affect

#### Rationale and Proposed Mechanisms of Change

A core component of most effective treatments is bringing about a situation where the patient spends sustained periods of time focusing on the source of the distress (Carey, 2011). As noted above, the source(s) of distress in patients with PTSD is not always face-valid and reportable by the patient. In fact, the ability to clearly describe the source of distress – specific conflicts between global schemas and traumatic meanings - is often associated with meaning having been made and therefore more closely associated with an endpoint of treatment rather than an ability that can be assumed to exist in the first few sessions. Thus, there is a clear need for interventions that rely on the clinician's expertise in identifying and promoting sustained contact with the patient's source of distress. Specific emotions signaling the source of distress include fear and anxiety, but also include anger, grief, shame, humiliation, and guilt (Grey, Young, & Holmes, 2002). When feelings arise in conjunction with the conscious consideration of specific conflicts, the causal inferences connecting the two are more likely to be valid. Further, the affect that was once intolerable is shown to be tolerable and thus, the need to avoid it decreases, breaking the cycle of avoidance and reexperiencing. In fact, a recent study demonstrated that therapy for PTSD was more effective when distressing, affectively-charged elements of the trauma were discussed with a higher frequency (Nijdam, Bass, Olff, & Gersons, 2013).

#### How Distressing Memories are Identified and Emphasized Throughout Treatment

Numerous indicators have been utilized in past research to identify the most distressing elements of traumatic memories. Similarly to Nijdam and colleagues (2013) and Holmes and Grey (2002), this treatment utilizes some signifiers that are conscious for the patient and able to be reported, such as their explicit identification of the most difficult moment. Other

indicators are less under conscious control, such as breakdowns in logical thought processes marked by incoherence, switching tense or pronoun, clear shifts in emotional tone, rushing through aspects of the trauma, nonverbal signals (e.g. welling up with tears), and identifying moments as present in intrusive thoughts. When patient begins to demonstrate any of these cues, the clinician works to maintain their attention by asking them to slow down, discuss their experiences in detail and/or point out when they are avoiding certain topics/areas. For example, when the patient provides a cursory discussion of what the clinician believes is the most difficult part of the trauma, the clinician can request that the patient slow down and discuss this topic moment by moment. Failing that, the clinician can always encourage the patient to explore why this is difficult.

# **Clinical Example of Following the Affect**

Pt (describing a dream associated with collapse of WTC towers): I was walking in the living room...maybe I was going towards the computer. I'm just walking through the house. And it started falling on top of me.

Th: All of a sudden?

Pt: I'm trying to remember what triggered it, but...then it just started falling on top of me. One piece started falling, like...and...you know...it just [Patient holds head] [Breakdown in thought process marked by incoherence and possible somatization]

*Th*: What's happening right now?

Pt: I'm having a migraine. Like a pain, right around here. [points to forehead] [Possible nonverbal cue of incoherence and somatization associated with negative affect]

Th: And it just started?

Pt: Yeah.

*Th*: Tell me what you're feeling. [Focusing patient's attention on negative affect]

Pt: My doctor's have been giving me medicine cause I've been getting headaches...

Th: It seemed like right then when you were talking about the first piece falling on you, you put your hand to your head. [Encouraging patient to slow down and discuss moment by moment]

*Pt*: Yeah, cause it was like...um...yeah, you know, I don't know, cause it was like the first piece. It fell on top of me. Everything was falling on top of me.

*Th*: Tell me, at the time, in the dream, what was going on? What were you feeling, what were you thinking?

Pt: I was thinking, "I'm dying." [Patient describes most difficult aspect of traumatic memory]

# **Intervention 3: Interpreting Defenses**

#### **Rationale and Proposed Mechanism of Change**

Emotional numbing and avoidance of stimuli that could serve as reminders of a traumatic event are core features of PTSD and serve to manage the possibility of excessive emotional arousal (Ehlers & Clark, 2000). Such strategies can be effortful (e.g., avoiding ground zero; drinking alcohol) or automatic (e.g., describing the trauma without affect). When automatic, psychodynamic approaches refer to these strategies as defensive operations (e.g., Cramer, 2008; Valliant, 1993). Ehlers and Clark (2000) have proposed that avoidance strategies can contribute to the development and maintenance of PTSD by directly producing PTSD symptoms, preventing change in negative appraisals of the trauma and/or its sequelae, or preventing change in the nature of the trauma memory. Therefore, interventions that address these operations as they occur in the session will likely improve outcomes. Westen (1986, p. 508) frames defensive operations as control mechanisms that reduce "an aversive feeling (or its anticipation)" generated by a mismatch between existing beliefs, desires, motivations, or object relations and conscious meanings made of a particular event. When this operation – whether behavior or defense - is successful, it is negatively reinforced and retained. The interpretation of defensive operations functions to de-routinize dysfunctional defenses by making them conscious (and thus rendering them less effective), connecting them to their unpleasant consequences, and reinstating conscious control where previously routinized or unconscious activation prevailed (Westen, 1986).

# How defensive operations are addressed throughout treatment

In psychotherapy for PTSD, defensive operations are most frequently encountered when discussing the meaning of the traumatic event to the patient. Although approaches to defense interpretations vary (see Olson et al. 2011 for a systematic review), there are several sequential principles that we find effective with this population. The clinician begins by noting what appears to be defensive operation, inviting the patient's close attention. Together, the clinician and patient examine clinical material surrounding the defensive operation to stimulate the patient's curiosity and motivate them to engage with the previously avoided painful emotion. Eventually, this should help them move towards an understanding of the function of the defense, perhaps also lessening their reliance on that operation. It is important that the patient contribute instances in which similarly-themed material has occurred, providing the clinician with the opportunity to confirm their defensive nature, and for the clinician to repeat interpretations of such operations across this material to ensure generalization. Finally, in later sessions, the clinician can discuss with the patient motives and historical factors to help make sense of the defensive operation. At each step, interpretations are typically associated with some anxiety, but not so much as to lead to an increase in the patient's utilization of such operations.

# **Clinical Example of Working With Defensive Operations**

*Th*: In your dream, you're out of the loop: you're doing routine tasks and then your building collapses on top of you and you had no idea it was coming.

Pt: So now I'm out of the loop and I have no idea what's happening? I guess I never thought about it like that. I guess when I knew what was going on, it was ok. But it makes sense though. Like if we got a bad call, I would say, "I'm not going in that area."

Th: So are there consequences to your safety in being less vigilant? [Clarifying situational meaning]

*Pt*: So your house is supposed to be your safety. Isn't that what everyone says? If someone comes to your house, where you going to run? [laughs] It's like, you are supposed to have barbed wire in your front yard with a rifle? You know? It's supposed to be a safety net. There's a huge unknown out there. [laughs] [Incongruence between affect and content indicating possible defensive operation]

Th: Right there, when you considered this horrible scenario where danger hits you where you live, and you're surrounded by barbed wire, you were laughing. But, it's not really funny. [Noting what appears to be a possible defensive operation, inviting the patient's close attention]

Pt: It's not funny, but you have to find the humor in it.

Th: If it's not funny, what is it? [Encouraging examination of clinical material surrounding the operation]

Pt: If that's falling on top of me, where's my stronghold? I'm out of the loop. It makes sense. I don't know what's happening. I don't even know what's happening in my house. [Patient engages with avoided meaning and affect rather than relying on defensive operation]

# **Discussion**

#### **Clinical Implications**

This paper provides a brief description of three specific therapeutic interventions that we believe promote positive treatment outcomes in first responders with full or partial PTSD related to their occupational exposure to the events and sequelae of 9/11. The interventions are components of a cohesive, integrative treatment approach combining prototypic elements of psychodynamic and cognitive-behavioral therapies tailored to this population. The goal of treatment is to help the patient to, "reestablish a sense of purpose and meaning in life, and hope for the future, in spite of the fear and loss inspired by the trauma" (Krupnick, 1997, p. 77). Such meaning-making is associated with but not equivalent to symptom reduction and is facilitated by focusing on the most affect-laden parts of the traumatic memories and helping the patient to relax implicit avoidance strategies upon which they have relied. For the purposes of this paper, these interventions have been separated from another. However, as illustrated in the clinical excerpts above, in practice they often are found within a single session and at times coincide, with one statement serving several purposes.

#### **Areas for Further Research**

While this intervention is deeply informed by others with more empirical support (e.g., Gersons et al., 2000), research is needed to evaluate the overall efficacy of this integrative therapeutic approach from both process and outcome perspectives in order to determine whether it promotes meaning making and is associated with improvements in symptoms and functioning. If so, the mechanisms described in this paper should next be tested through dismantling and/or comparison studies with alternative treatments. For example, a dismantling study could test whether personalized meanings are an essential component of treatment by examining the impact of this intervention if the clinician failed to inquire regarding patients' idiosyncratic meanings. As a first step to empirically test defensive operations, Olson and colleagues (2011) have suggested a naturalistic design in which session transcripts are coded for the use of various defense interpretations and then examined with treatment outcomes. Finally, research examining whether following the affect is comparable to imaginal exposure as instantiated in first line CBT treatments in promoting positive outcomes. Research focusing on these questions would help to refine this treatment and distinguish it from other evidence based trauma treatments.

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