

Contrasting Exposure And Experiential Therapies For Complex Posttraumatic Stress Disorder

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Abstract

In this paper, we compare and contrast two psychotherapy paradigms for the treatment of complex posttraumatic stress disorder (PTSD): a behavioral therapy (prolonged exposure; PE) and an experiential therapy (Accelerated Experiential Dynamic Psychotherapy; AEDP). PE has received strong research support as an effective treatment for PTSD. The scientific evidence for experiential therapy is sparser, but also positive. In addition, clinical and research evidence suggest that (1) experiential processes are inherently embedded in PE, and may influence PE outcomes; and that (2) AEDP addresses several clinical and relational factors that are negative prognostic factors for PE (e.g., affect dysregulation, disorganized attachment, sense of alienation and mental defeat, dissociation, and disorders of the self). Suggestions are provided for further empirical exploration of the process and efficacy of AEDP and experientially-informed PE for complex cases of PTSD.

From Freud's notion of abreaction (Breuer & Freud, 1893/1956) to modern behavioral (Barlow, 1993; Foa & Kozak, 1986) and experiential (Greenberg, Watson, & Lietaer, 1998) psychotherapies, the facilitation of patients' therapeutic engagement with emotionally-laden, avoided psychic material is a common cornerstone of healing. In this paper, we explore how two divergent therapies, PE and AEDP, pursue this common goal in the context of treatment of complex PTSD. We argue that the differences between these two therapies may affect their suitability within certain patient populations: PE may be more effective in treating simple cases of PTSD (e.g., single event traumas uncomplicated by personality, dissociative or attachment pathology), while AEDP addresses more factors associated with complex PTSD, such as severe and complicated forms of emotional dysregulation, entrenched defenses, dissociative symptoms, as well as attachment disturbances that perpetuate mistrust, difficulty in forming a therapeutic alliance, and withdrawal (Fosha, 2003). Although we draw on empirical evidence whenever available, this paper is primarily a theoretical exploration aimed at generating future empirical studies to help match patients with appropriate and optimal treatments.

Behavioral psychotherapies have been found to be highly effective in ameliorating some symptoms of posttraumatic stress disorder (Foa, Keane, & Friedman, 2000) and experiential psychotherapies have shown promise (Paivio & Nieuwenhuis, 2001) in randomized clinical trials. However, little evidence or discussion is available concerning the outcome of either of these approaches (or any other therapeutic model) for treating complex forms of PTSD. Complex PTSD is a widely recognized (Herman, 1992a), yet still somewhat controversial construct that differs in significant ways from PTSD (Ford, Courtois, van der Hart, Nijenhuis, & Steele, 2005). PTSD is currently categorized in the DSM-IV as an anxiety disorder stemming from life-threatening experiences such as combat, car accidents, rape, assault and natural disasters (APA, 1994). PTSD symptoms fall into three domains: 1. re-experiencing the trauma through nightmares and flashbacks; 2. avoidance of stimuli associated with the trauma; and 3. hyperarousal, such as difficulty sleeping, angry outbursts and startle response. Yet many trauma theorists and researchers assert that PTSD does not cover the full extent of symptomatology resulting from trauma, especially chronic, extreme forms of developmental trauma (e.g., Ford, 2005).

Complex PTSD extends beyond these classic PTSD symptoms to include difficulty in regulating extreme emotion states, dissociation, medically unexplained bodily distress, and profoundly negative beliefs about self, relationships, and existential meaning (Herman, 1992a). The symptoms of complex PTSD are the sequelae of what Ford (2005) has described as "developmentally adverse interpersonal trauma (DAIT)," such as chronic and severe childhood neglect, emotional, physical, and/or sexual abuse. The aftermath of such trauma tends to be more complex and multifaceted forms of dysregulation of affect, attachment, information processing, bodily processes, consciousness, and spirituality, which require "multimodal, integrative treatment protocols that do justice to the various aspects of posttraumatic psychiatric morbidity in realistic clinical settings" (Schynder, 2005, p. 200).

Empirical evidence of complex PTSD (also at times referred to as DES: Disorders of Extreme Stress; Ford, 1999) suggests that it is a distinct diagnostic construct from PTSD (Ford, 1999; van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005). In addition, Ford and Kidd (1998) found that the presence of complex PTSD was a negative prognostic factor in the

treatment of PTSD, suggesting that perhaps standard PTSD treatments do not address the core problems of complex PTSD as described above, that these problems can interfere with effective resolution of PTSD symptoms. Finally, although a formal complex PTSD diagnosis does not yet exist for adults, one is currently underway by the National Child Traumatic Stress Network for severely and chronically traumatized children (Developmental Trauma Disorder; van der Kolk, 2005).

Although PE's targeting of trauma-related fear is an essential one, we contend that patients who suffer from complex PTSD require treatment protocols that extend beyond a singular focus, and that many of the symptoms mentioned above may function as obstacles to effective fear reduction. Therefore, we present AEDP as a "multi-modal, integrative" model well-equipped to address the clinical complexities of complex PTSD. AEDP's specific relational interventions restructure attachment pathology that could otherwise obviate patient trust and openness in the therapeutic relationship (Fosha, 2000). Building a strong and secure attachment in the therapeutic relationship forges the way to safe and shared emotional processing of not only fear, but also grief, rage, helplessness, and unbearable aloneness. Furthermore, AEDP's construct of "dyadic regulation of affect" (Fosha, 2000, 2001a), procedurally counteracts the isolation of the chronically traumatized patient, and ensures that emotions are neither too overwhelming and dysregulating, nor too constricted and suppressed.

Thus, in this paper, we compare and contrast how the behavioral approach to PTSD psychotherapy, "prolonged exposure" (PE), and an experiential approach to PTSD psychotherapy, Accelerated Experiential Dynamic Psychotherapy (AEDP) address both PTSD and complex forms of PTSD. We begin by outlining the underlying theories and clinical applications of PE and AEDP as trauma therapies, and then proceed to a critical comparison of the two in the domain of treating complex PTSD. Our aim is to elucidate the theoretical and technical similarities and differences of PE and AEDP, and to describe potential indications and contraindications for psychotherapists that can be tested clinically and in scientific research.

Prolonged Exposure Therapy for PTSD: Theoretical Underpinnings and Clinical Models

In prolonged exposure therapy (PE), patients are assisted in vividly recalling specific trauma memories and imagining or actually encountering avoided stimuli associated with past traumatic experiences. Therapeutic "exposure" to trauma memories and to current cues that elicit traumatic stress symptoms is hypothesized to stimulate "emotional processing" of fear and anxiety, and to enhance psychosocial functioning by reducing life-constricting avoidance, i.e., attempts to avoid traumatic reminders of past traumatic experiences (Foa & Kozak, 1986).

Although exposure to feared internal and external stimuli is endemic to most therapies in some form or another (McCullough & Andrews, 2001; Westen, Novotny, & Thompson-Brenner, 2004), PE emerged from the fields of learning theory and behaviorism (Farmer & Nelson-Gray, 2005). Originating in the late nineteenth and early twentieth century, behaviorism focused on the association between stimuli and observed organism responses, as an extension of the animal research of Pavlov and Skinner on classical conditioning and operant conditioning, respectively.

Mowrer's two-factor theory (1960) combines classical and operant conditioning principles to explain how innocuous sensory elements of traumatic memories (e.g., smells, sounds, places) can come to evoke intense fear, long after a traumatic event (Foa, Steketee, & Rothbaum, 1989). In terms of classical conditioning, an unconditioned fear response elicited by

genuinely traumatic experiences becomes generalized as a “conditioned response” that is elicited by a wide range of “conditioned stimuli” that are not actually associated with danger. For example, in the case of a child who was abandoned by a primary caregiver, she may associate relational intimacy with abandonment, and thus experience fear at any sign of emotional closeness with others, even when the actual threat of abandonment is low.

The second factor, operant conditioning, is hypothesized to occur in PTSD as the result of attempts to avoid or escape conditioned fear responses. When these attempts at avoidance result in a reduction in the anxiety associated with conditioned fear stimuli (i.e., reminders of traumatic events), avoidance becomes chronic as the result of negative reinforcement (reduction of distress is the “negative” reinforcer). In the above example, the child, and later adult woman may avoid intimacy as a way of avoiding her fears associated with abandonment. However, avoidance also increases the strength of the association between conditioned fear stimuli and conditioned fear responses by repeatedly pairing them together (Foa et al., 1989). Thus, from a behavioral perspective, continued avoidance of traumatic reminders and associated distress leads to PTSD by strengthening the apparent relationship between these phenomena—and this strengthens the tendency of the individual with PTSD to continue to engage in avoidance. In our example, the longer this woman avoided intimacy in relationships, the stronger her conviction that closeness leads to abandonment would become. PTSD, therefore, is viewed as a vicious cycle in which cues associated with psychological trauma and the resultant fear cause anxiety, and attempts to lessen the anxiety by avoiding the cues and feelings of fear lead to relief from anxiety in the short-run but intensified anxiety over the long-run.

PE for PTSD (Foa et al., 1996) attempts to break this vicious cycle by having patients repeatedly and vividly re-live (rather than attempting to avoid) a specific traumatic memory for an hour or more in therapy sessions, while distress is continuously tracked using subjective self-report. Patients are encouraged to incorporate as many visual and sensory details as possible in order to fully evoke the memory and activate underlying fear structures. In successful PE, the patient's distress and anxiety rise, peak, and then subside as the unreinforced (i.e., no actual harm occurs) repeated pairing of the conditioned stimuli (CS; i.e., the vivid memory of the traumatic experience) and the conditioned response (CR; i.e., fear) enables the patient to learn that the CS no longer evokes the CR (i.e., the trauma is not actually happening all over again, and therefore the memory or reminders of the trauma no longer signal danger). PE embodies two behavioral paradigms: response prevention (i.e., avoidance is prevented by active memory recall) and extinction learning (i.e., repeated pairing of CS [the trauma memory] and CR [fear] without an unconditioned stimulus [actual harm] leads to learning that the CS does not signal actual danger).

Foa and Kozak (1986) elaborated this behavioral model by positing an information-processing theory of fear. They proposed that “fear is represented in memory structures that serve as blueprints for fear behavior” (p. 21), and that pathological fear is characterized by excessive arousal, habitual avoidance, and cognitive distortions about the stimuli and the self, i.e., that the world is unsafe and the self is helpless. According to Foa and Kozak (1986), therapeutic emotional processing of a traumatic memory occurs in PE when fear structures are fully activated and then modified by the incorporation of new information (e.g., safety, empowerment) that is incompatible with the original fear structure. Successful PE is thus defined not only as the reduction of fear and avoidance, but also as the enhancement of a sense

of mastery and personal competence as the result of having faced a feared and dreaded memory (Foa & Jaycox, 1999).

More recently, empirical studies have found support for the hypothesis that PE reduces fragmented and externally-oriented narratives of traumatic experiences, while increasing organized and internally oriented ones (Foa, Molnar, & Cashman, 1995). A replication study found that all PTSD patients receiving PE showed an increase in organized thoughts and a decrease in fragmented thoughts in their descriptions of traumatic experiences, and that patients who significantly improved showed a greater decrease in disorganized thoughts than patients who did not (Van Minnen, Wessel, Dijkstra, & Roelofs, 2002). The latter results were interpreted as showing that PE may enhance the narrative organization of memories of traumatic experiences (Hembree & Foa, 2000).

Studies regarding the extinction of fear – a central goal of PE – are more mixed. Jaycox, Foa, and Morral (1998) found that clients who had a pattern of high initial engagement with the exposure task (measured by high initial subjective distress) and gradual habituation of distress between sessions showed the most improvement. Also, clients expressing more facial fear (coded from videotapes) in the first exposure session had more severe PTSD and benefited more from treatment (Foa, Riggs, Massie, & Yarczower, 1995). Yet, subsequent evidence suggests that the length of PE sessions and the extent to which the patient self-reports reduced fear or arousal during PE are not related to PE outcome (Van Minnen & Foa, 2006). Thus, although PE is consistently associated with reductions in self-reported distress and avoidance of reminders of traumatic experiences, it is not clear whether PE actually reduces either the avoidance or fear related to memories of traumatic experiences.

The original conditioning-based behavioral hypothesis remains plausible, but alternative hypotheses have gained support: i.e., that PE's effects are due to the development of a more coherent personal narrative of traumatic past experiences. The narrative reconstruction model of PE is consistent with many models of PTSD psychotherapy (e.g., Herman, 1992a). Evidence suggests that repeated telling of personal narratives of stressful experiences may reduce health complaints and traumatic stress symptoms (Pennebaker & Stone, 2004), and that a link exists between disrupted trauma narratives and traumatic stress pathology (Amir, Stafford, & Freshman, 1998). Cognitive Processing Therapy (CPT), which contains a written exposure task, was designed specifically to reduce avoidance of memories of traumatic experiences and also to develop coherent narrative accounts to replace otherwise fragmented trauma memories (Resick, Nishith, Weaver, Astin, & Feuer, 2002; Silva et al., 2003).

Clinical applications and interventions.

PE prepares patients to confront trauma memories safely by anticipating and managing the spontaneous re-emergence of intrusive re-experiencing. PE therapists explain that intense fear or anxiety are not a random occurrence but instead happen when current events trigger either memories of past traumas or feelings of distress that are the same as, or very similar to, those that she or he understandably felt in past traumatic experiences. Thus, PE may enable the patient to take control of this otherwise automatic “re-experiencing” process (e.g., flashbacks or intrusive visual or somatic trauma memories) by choosing to recall trauma memories safely rather than being blind-sided by their unexpected occurrence.

During PE, patients are likely to experience intense distress, at least initially. PE addresses this problem in a relatively straightforward manner. When the patient feels fear or anxiety, the PE therapist encourages her or him to do two things to maintain or regain a sense of personal control and safety. The first therapeutic tactic is to keep describing immediate sensory awareness, which may enable the patient to assume the role of a reflective observer rather than an overwhelmed participant. The second tactic is to use self-talk (with the therapist modeling this verbally) to remember that she or he is safe and not alone because the therapist is there and that the events are not actually happening now and are less likely to ever happen again in the same traumatic manner because she or he is choosing to deal with them directly and safely rather than avoiding and allowing them to remain sources of fear and anxiety (Hembree et al., 2003). Finally, an overwhelmed patient might be encouraged to use slow and measured breathing techniques for managing in-session excessive distress; patients are typically taught breathing retraining strategies before embarking on the exposure protocol.

Challenges for PE as a therapy for Complex PTSD.

While PE has revolutionized PTSD treatment by providing effective, manualized protocols that have been demonstrated to achieve symptom relief in numerous studies with trauma survivors (Butler et al., 2006), clinicians employing PE face several significant challenges (Cahill, Foa, Hembree, Marshall, & Nacasch, 2006). Dropout rates for PE for PTSD were as high as 33-43% in three of the largest studies¹ (Hembree et al., 2003), and in a recent study with women military veterans (Schnurr et al., 2007). Up to 58% of patients treated with PE still meet criteria for PTSD at the completion of treatment (Schnyder, 2005). Real-world clinicians rarely implement PE (Cook, Schnurr, & Foa, 2004; Zayfert et al., 2005) and, by design, studies validating PE tend to exclude persons with complex comorbidities and severe impairments (Foa et al., 1999; Spinazzola et al., 2005)—with some noteworthy recent exceptions in which adults with relatively chronic PTSD (i.e., Mean duration > 9 years; Nemeroff et al., 2006) and histories of childhood abuse (Resick, Nishith, & Griffin, 2003; McDonagh-Coyle et al., 2005) were included in the samples. Preliminary evidence suggests that both PE and a modified approach combining therapeutic exposure and cognitive restructuring (cognitive processing therapy, CPT) are equally effective in reducing PTSD and some complex PTSD symptoms (e.g., dissociation, difficulties with arousal regulation) in women with or without a history of childhood sexual abuse (Resick et al., 2003). However, CPT and PE were not as effective in reducing a symptom that is an important element in complex PTSD, “impaired self-reference” (i.e., viewing oneself as permanently damaged or worthless; Herman, 1992b), with women who had experienced childhood sexual abuse as they were with women who had no history of childhood sexual abuse (Resick et al., 2003).

In addition, although contemporary approaches to PE emphasize the importance of a therapeutic alliance and “emotion processing” (Hembree et al., 2003), there has been no

¹ In a meta-analytic comparison of drop-out rates across various CBT therapies (PE, cognitive therapy, stress inoculation training and EMDR) Hembree and colleagues (2003) reported no statistically significant differences between therapies, though drop-out was consistently high for all (19%-27%).

systematic research on how this can or should be accomplished. Despite research showing that clients' perception of the therapeutic relationship in a behavior therapy was predictive of dropping out and immediate post-therapy gains (Ford, 1978), many behavior therapies have proceeded with "minimal regard" for therapeutic alliance (Lejuez, Hopko, Levine, Gholkar, & Collins, 2006, p. 456). Proponents of adapting PE to include broader relational issues have advanced a number of creative clinical strategies in order to enable therapists to address cognitive schemas beyond those involving fear/anxiety (e.g., hopelessness, worthlessness; Cason, Resick, & Weaver, 2002; Silva et al., 2003), and to enhance and build upon the therapeutic relationship (Briere & Scott, 2006; Messman-Moore, & Resick, 2002). Lejuez and colleagues (2006) have reviewed several behavioral therapies (other than PE) that actively use the therapeutic relationship as a vehicle for change. However, the guidance available to therapists concerning how to develop and sustain a working alliance, how to titrate the intensity of affect expression within the therapist/patient dyad, and how to ensure that patients actually learn skills for regulating distressing affects and resolving intrusive trauma memories while employing PE, is sparse and not grounded in either theory or research (Hembree et al., 2003). These concerns are accentuated in the domain of complex PTSD, where patients present with more deeply entrenched attachment pathology and greater extremes of emotional dysregulation.

As a result, clinicians need strategies for maximizing the effectiveness of PE when working with patients suffer from severe PTSD and complex comorbidities such as borderline personality disorder, dissociative disorders, or major depression (Zayfert et al., 2005). High levels of avoidance symptoms—the primary target of PE—and depression were most strongly associated with dropout from PE in one study, with peak rates of dropout occurring prior to the initiation of PE tasks (i.e., in the initial psychoeducation phase; Zayfert et al., 2005). Similarly, McDonagh-Coyle and colleagues (2005) found that the most common time-points for women in treatment for childhood sexual abuse-related PTSD to drop out of CBT-PE were just prior to the first session of PE or after a mid-treatment evaluation by the patient and therapist of the benefits and difficulties the patient had experienced with PE. These findings suggest that either the anticipatory anxiety engendered by the prospect of PE or distress related to initiating PE are important foci to consider when PE is a component of treatment, particularly with patients who present with severe PTSD and comorbid disorders. Based on this concern, Cloitre, Koenen, Cohen, and Han (2002) developed and demonstrated the efficacy of a preparatory intervention designed to increase the acceptability and benefit of PE for women with PTSD and abuse histories. As their Skills Training in Affect and Interpersonal Regulation (*STAIR*) approach has evolved, increasing emphasis has been placed upon helping patients to not only prepare to tolerate PE but also to engage in trauma memory recall with the explicit purpose of regaining "mastery of memory" (Harvey, 1996) rather than only to reduce avoidance.

Acknowledgement of these issues and the positive potential for enhancing the clinical implementation of PE has led to calls for the development and testing of broader "second generation strategies" (Lombardo & Gray, 2005; see also Ford et al., 2005) to treat complex forms of PTSD. The use of the expression "emotional processing" (Foa & Kozak, 1986) as a theoretical explanation for the curative factors presumed to underlie PE suggests that, although PE originated as a translation of animal and human research on fear conditioning, a good deal more may be involved in successful PE than altering conditioned fear. As we next discuss,

AEDP, with its broader focus on the therapeutic relationship and a range of emotions that include but are not limited to fear and anxiety, may offer a way to address these concerns with PE.

Accelerated Experiential Dynamic Therapy (AEDP) for PTSD

Accelerated Experiential Dynamic Psychotherapy (AEDP; Fosha, 2000, 2001a & b, 2003, 2006; Lamagna & Gleiser, 2007) seeks to promote recovery from PTSD and complex PTSD by transforming diffuse distress, fear, and anxiety into more fully articulated and better regulated emotions, memories, and adaptive action on behalf of the self. Fundamental to AEDP is that its emotion-focused interventions are grounded in an experientially explored, attachment-based therapeutic relationship. We hope to show how these and other features of AEDP may actually extend the capacity of PE to achieve the extinction of learned fear and the reduction of anxiety-driven avoidance of traumatic memories with survivors of complex trauma.

Experiential psychotherapies (ExTs) arose from the client-centered, existential, and Gestalt traditions. Part of the inheritance from these traditions includes a two-pronged emphasis on enhancing patients' abilities to (1) access and modulate emotion, in the context of (2) an affirming, supportive, empathy-based therapeutic relationship, where the patient's resources are both assumed and valued (e.g., Greenberg, Rice, & Elliott, 1996). ExTs have also evolved refined techniques for facilitating emotion processing that involve closely tracking fluctuations in somatic experience. For example, the micro-tracking of subtle types and shifts in body states and experiential explorations of their "felt-sense" (Gendlin, 1996) can provide a basis for becoming more aware of affective, relational and narrative processes (Fosha, 2003; Greenberg & Safran, 1989; Levine, 1997; Ogden, Pain, & Fisher, 2007). ExTs also use expressive, process-driven tasks such as Gestalt-derived imaginary self/other dialogues or guided portrayals of emotional expression and action, which are used to deepen and transform awareness of emotional experiencing (Fosha, 2000; Greenberg & Paivio, 1997).

Although AEDP has not yet been validated in clinical trials, experiential psychotherapies in general have accrued strong empirical support in 86 controlled and uncontrolled outcome studies (Elliott, 2001). One meta-analysis of a subset of 26 of these studies yielded an average pre-post effect size of 1.1, which rose to a 1.2 overall effect size including follow-up data (Elliott, 2001). More specific to this paper, to date there has been one randomized trial of experiential therapy with trauma survivors, which yielded pre-post effect sizes averaging 1.53 across seven outcome dimensions. That study of Emotion Focused Therapy with adult survivors of childhood abuse (EFT-AS) found clinically and statistically significant positive effects across a variety of functional domains, including general symptomatology, interpersonal problems and changes in how clients treat themselves, as compared to a waitlist condition (Paivio & Nieuwenhuis, 2001)². EFT-AS is similar to AEDP in many aspects (see Fosha, Paivio, Gleiser, & Ford, in press), specifically in its focus on emotional regulation and processing and providing a "corrective interpersonal experience with the therapist" (Paivio & Nieuwenhuis, 2001, p. 117). (Key distinctions will be noted below in the elaboration of AEDP). A follow-up process-outcome

² The drop-out rate in the active experiential condition was 13.6% -- considerably lower than those reported in the CBT studies; however, the drop-out rate in the delayed/waitlist condition was comparable at 27.7%.

study (Paivio, Hall, Holowaty, Jellis, & Tran, 2001) examined the relative contributions of treatment alliance and imaginal confrontation (e.g., of perpetrators) -- an experientially informed exposure task -- on specific and global outcome measures. In those analyses, therapeutic alliance predicted improvements in self-esteem and trauma resolution, while imaginal confrontation was related to amelioration of global and trauma-specific symptoms and interpersonal problems. Further analyses by Paivio, Holowaty, and Hall (2004) demonstrated that therapists' relationship skills were associated with the resolution of distress associated with abuse memories, while technical skill in assisting patients in experientially confronting traumatic relationship schemas was associated with improvements in interpersonal functioning and extra-therapy relationships. These reports demonstrate the potential that experiential psychotherapy holds for enhancing the therapeutic relationship in the context of which trauma memory work occurs, as well as the technical skill of therapists.

Dyadic Affect Regulation to Engender Secure Attachment and Regulate Emotions.

AEDP's central focus on the *dyadic regulation of affect* in the context of an attachment-based therapeutic relationship is particularly important in the treatment of complex PTSD. Dyadic affect regulation refers to the multitude of ways in which one person can assist another in the regulation of intense, overwhelming, disorganizing emotions and affective states, be they distressing and negative, or healing and positive. An example of dyadic emotion regulation in the mother/baby dyad occurs when a baby wakes up from a nightmare, wailing. As his fear and distress exceed his ability to self-soothe, the baby cries louder and louder, getting more and more out of control until his mother comes running in, she herself experiencing some level of empathic distress in the face of his distress. As the baby is reassured by the mother's soft voice, calming words, and gentle touch, his crying slows and stops, his heart rate returns to normal and his body relaxes. The dyad calms down together; in that moment of resonance and mutual comfort, the baby can fall back asleep. Furthermore, their bond is strengthened as a result of their successful negotiation of this challenge.

As in the above example, a primary aim in AEDP is having the patient not be alone with intense emotional experience. Survivors of complex and chronic trauma are accustomed to being alone with their overwhelming feelings, cut off from others because of shame, fear of rejection, and/or the lack of available supports. In addition to enduring physical, emotional and sexual trauma as children, many were victims of what AEDP identifies as *caregiver errors of omission* and *commission* (Fosha, 2000) in which parental withdrawal, rejection and scorn are standard responses to the child's attempts to express his feelings or seek help regulating their intensity. The child learns that certain emotional experiences are disruptive to her caregivers and thus have to be disowned or endured in silent distress if the vital attachment bond is to stay alive (Fosha, 2000).

From a developmental neuroscience perspective, Schore (2001) describes how repeated, emotionally charged dyadic interactions with a caregiver essentially 'hard-wire' the infant's right brain, for better or for worse. In optimal situations, where a responsive parent soothes distress, facilitates emotional communication, and maximizes playful, positive affect states, a secure attachment is forged between parent and child and cognitive/emotional development unfolds favorably. However, in the case of early relational trauma, where the caregiver exhibits frightened (e.g., as in the case of parental unresolved trauma) or frightening (e.g., aggressive,

abusive or violent) behavior in the face of infants' emotions, the child may develop a disorganized style of attachment, in which the child's attachment system compels him/her to seek safety from the very individual precipitating the fear or danger (Main & Hesse, 1990; Lyons-Ruth & Block, 1996). "Disorganized" attachment, in which no organized strategy for eliciting care, soothing, or regulation from others exists (Lyons-Ruth & Block, 1996; Hesse et al., 2003; Schore, 2003; Siegel, 2003), comes to characterize the child's relationship to caregiver(s) and eventually shapes the child's internal working models of relationships in general. Thus, even though many survivors are plagued by powerful, unmet needs for security, comfort, and the presence of an understanding guide, they remain isolated in terrifying internal worlds of unbearable, dysregulated and often dissociated feelings. Fosha (2002) refers to such states as *unbearable states of aloneness*.

AEDP seeks to remedy such states, catalyze patients' natural resilience and develop alternate internal working models by co-creating new emotional and relational experiences within the therapeutic dyad (Fosha, 2000, 2001a, b, 2003, 2006, 2008). Below, we will focus on how AEDP uses *attachment based* strategies to facilitate *new relational experiences*, and *emotion-processing* strategies to facilitate *new emotional experiences*.

Attachment Based Strategies in AEDP.

According to attachment theory, secure attachment promotes an expanded range of exploration (Bowlby, 1988). Being with a psychotherapist who is experienced by the patient as a steadfast and trusted companion enhances the patient's courage and resources to experientially explore previously dreaded trauma memories. To achieve that involves both *leading* (from the position of the attachment figure perceived as "stronger and wiser" (Bowlby, 1982)), and *following* (i.e., being sensitively attuned and responsive³ (Ainsworth et al., 1978)). It also involves being explicitly empathic, affirming, affect-regulating, emotionally engaged, and willing to help, thus procedurally modeling *affective competence* (Fosha, 2000).

AEDP also has focal interventions for building a relational foundation in which patients can accept and experience empathy and safety. AEDP holds that it is not sufficient that attachment operate implicitly: the patient's *experience* of the attachment relationship needs to be a major focus of therapeutic work (Fosha, 2006). In practice, this involves the therapist consistently and carefully paying attention to the patient's *receptive affective experiences* (Fosha, 2000, 2006; Russell & Fosha, in press) – a concept unique to AEDP within the experiential therapies. Sensitively but directly, there is a systematic exploration of *whether* and *how* the patient feels seen, felt, helped, cared about and/or understood by the therapist. Such detailed and explicit experiential explorations of receptive experiences reveal how the patient is actually experiencing the therapist. The aim is to enable the patient to increasingly experience the therapeutic relationship (and by extension, other psychologically healthy relationships) as a source of safety, euthymia, and increasing confidence in his ability to manage intense emotions.

³ This aspect of "following" – i.e. being attuned, responsive and empathic to each individual patient's unique needs (in concert with a clinician's basic multicultural competence), is an essential ingredient in a multicultural sensitive treatment.

Many survivors of extreme and chronic trauma present in treatment with both intense longings for and formidable barriers against intimacy and deep relational connection. Past betrayals, abuse, neglect and the above referenced errors of omission and commission create in survivors overactive protective systems that manifest as entrenched defenses against relating. While this poses an initial challenge to connection, in essence, it is precisely what AEDP's relational interventions are designed to surmount. The AEDP therapist is continually tracking and monitoring the quantity and quality of the connection and making gentle and tentative comments to reflect this back to the patient, thereby increasing awareness and making connection a shared and explicit goal. For example the therapist might say, "I notice that when you start to talk about how alone you were as a child, it's hard for you to look at me. I feel you drifting away from me, right when I feel the urge to stay close." Then the therapist would invite the patient to compare his/her subjective sense of what is happening in the dyad, and if the comment was empathically accurate, they could then go on to explore the motivations behind the distance. Often this leads directly into the site of past relational damage and wounds, such as chronic withdrawal or shaming by a caregiver. Or, if the reason were rooted in the real relationship with the therapist, in the form of an actual, present-moment rupture (i.e., the patient felt pressured, rushed, intruded upon, etc.), this presents an opportunity for repair and re-coordination (Safran, Muran, Samstag, & Stevens, 2002). Such sequences lead to renewed and strengthened connection in the therapeutic dyad, while simultaneously expressing the desire for closeness, resonance, and moments of shared experience, as well as the commitment to face unflinchingly tensions, ruptures and negative affect that arise in the relationship. Often, the process of realizing, feeling and meta-processing such sequences catapults the dyad into the heart of core affective phenomenon (to be described next) with the uprising of the patient's grief or outrage on behalf of the self at having been deprived of such care and vigilance as a child. Thus, while the AEDP therapist capitalizes on the emergence of transference relational patterns and feelings in session, she does so from the secure stance of the actual, present, and collaborative therapeutic relationship (Fosha, 2000). Eventually the emotion processing strategies of the dyad become integrated in the patient's emotional repertoire. The patient develops new fortified internal working models characterized by adaptive relational and emotion processing.

Emotion Processing in AEDP.

As with PE, emotional processing is central to AEDP, although the two modalities' definitions and the means to achieving this goal differ considerably. In AEDP, "emotions are conceptualized neither as expressions of instinctual impulses nor as learned responses ... [but instead] as an orienting system that provides the organism with adaptive information" (Greenberg & Safran, 1989, p. 20). AEDP views emotions --including fear-- as psychobiological vehicles of adaptation (Damasio, 1999) whose profound transformational properties must be harnessed to achieve psychotherapeutic results. Each basic emotion has a specific and universal biological signature, and is also associated with an *adaptive action tendency* that "...offers a distinctive readiness to act; each points us in a direction that has worked well to handle the recurrent challenges of human life" (Goleman, 1995, p. 4). For example, the adaptive action tendency of anger is to protect the self, to energize an individual to recognize and defend against attacks, injustice or boundary violations, and to actively pursue solutions to these situations. Fear serves to orient the individual to danger or threat, and initiate action toward self-

preservation, whether fighting, fleeing, hiding, or seeking protection. Processing an emotion to completion does not mean getting rid of it. Rather, it shifts the valence of emotion for the patient from negative (e.g., “This is overwhelming;” “I can’t handle this;” “It’s too painful;” “Better stay far away from this.”) to positive (e.g., “We can get through this to the other side;” “This feeling is here for a reason.”), while releasing the valuable information and readiness to act on behalf of the self embodied within a particular emotional experience (Fosha, 2004, 2008).

AEDP tracks emotional experiences via an ongoing, moment-to-moment assessment, carefully differentiating *secondary, defensive or pathogenic affects* -- all of which require active regulation and transformation -- from *adaptive emotions and core affective experiences*, which bear the seeds of healing and are inherently transformative (Fosha, 2004). As a result of having to face overwhelming emotional experiences in isolation, many trauma survivors over-regulate, or avoid core emotions, a strategy that alienates them from themselves and prevents them from getting feedback from life situations. AEDP interventions gradually invite patients to more fully experience their core affects through somatic focusing, affective mirroring, and evocative portrayals (e.g., imaginary dialogues with others, or with parts of the self; completing incomplete emotion and action sequences; etc.).

In the context of a secure, emotionally-facilitating dyadic relationship, AEDP’s fundamental goal is to help the patient process adaptive emotions to completion. This goal is accomplished by working with a process that in AEDP (Fosha, 2004, 2005, 2008) involves *three states* --(1) symptoms, stress, and distress, (2) core affect, and (3) core state-- and *two state transformations* (from stress to core affect, and from core affect to core state).

In State 1, the symptoms, difficulties, and suffering that lead patients to seek treatment dominate the clinical picture. As a result of dysregulation (either under- or over-regulation of emotion), perceptions in this state tend to be inaccurate, thoughts confused or not well grounded in actual circumstances, and goals and actions insensitive to the situation and consequences. State 1 work involves identifying and helping the patient to recognize and overcome two classes of affective phenomena that interfere with somatic access to emotional experience: (i) *defenses* (e.g., denial, numbing, projection, etc); and (ii) *inhibiting affects* (e.g., anxiety, fear, shame). When interventions aimed at these State 1 phenomena are effective, glimmers of *core affective experience* (e.g., grief, pain, anger, compassion for self, longing for connection) start to peek through and become the focus of therapeutic attention. The therapist mirrors and amplifies these glimmers of emotion. Helping patients move from defensive avoidance to awareness of core affect constitutes the first state transformation. The experiencing and processing of core affective experience constitutes State 2.

State 2 interventions involve regulating, processing and working through to completion the intense emotions associated with trauma and its sequelae. State 2 work demonstrates the extent to which authentic primary adaptive emotions can serve as guides to adaptation. As patients become able to process such emotional experiences, they notice that they can do so without feeling overwhelmed or trapped; instead, they notice they feel relief and a budding sense of resilience and resourcefulness. Negotiating the full wave of emotional experience with reflective awareness and connection to the therapist unlocks innate adaptive action tendencies and releases the positive affects (e.g., hope, mastery, relief, self-compassion) that underlie resilience (Frederickson & Losada, 2005).

In most ExTs, the accessing of the positive aspects of emotion marks the end of emotion processing. Uniquely in AEDP, it heralds the beginning of one more phase of work: the *metatherapeutic processing* of the successful experience just completed. The term *metatherapeutic* refers to the reflective and experiential processing of *what the patient feels is therapeutic* about the therapeutic experience he or she has just had. Thus, the experience of transformation becomes the focus of the last round experiential work. This often accesses yet another wave of affects, the invariably positive transformational affects (e.g., pride, joy feeling moved, gratitude) associated with the experience of healing change. Processing this second affective wave to completion brings about core state (Russell & Fosha, in press).

Core state, called the "crown jewel of AEDP" by Fosha and Yeung (2006), is a highly integrated state of calm, clarity, ease, compassion, and self-compassion. Patients talk about feeling open and having a sense of being grounded, solid, in flow, and at ease. They often say "This feels like me." Core state is what has been lost (or never discovered) as a result of the shock and helplessness that occur in developmentally adverse interpersonal trauma (Ford, 2005; van der Kolk, in press). The spontaneous integration of affect and cognition that occurs in core state gives rise to capacity for reflective observation and self-awareness that Fonagy (2001) calls "mentalizing." Thus resourced, the patient can now generate a coherent and cohesive autobiographical narrative, a capacity highly correlated with resilience and secure attachment (Main, 1999). Resilience is a hallmark of core state: a person can monitor and utilize accurate perceptions and meaningful thoughts to set and achieve goals that are self-enhancing and relationally optimizing. Finally, clarity of purpose, agency, and confidence in one's capacity to act on behalf of the self are equally essential features of core state (Fosha, 2008).

By facilitating the shift from defensive avoidance to core state through processing previously feared to be unbearable emotions (and often doing so within one session), AEDP provides patients with an immediate experience of secure self-awareness and competence that is the hallmark of new learning and of genuine recovery from PTSD. AEDP thus aims to achieve a therapeutic transformation of the phenomena associated with complex PTSD--both the chronic high arousal phenomena, (e.g., hyperarousal, hypervigilance and startle responses), and the chronic disengaged maladaptive low arousal phenomena (e.g., freezing, paralysis and numbness)-- into the highly engaged, highly adaptive, socially engaged low arousal phenomenon of core state (Porges, 1997, 2005; Russell & Fosha, in press).

These guiding premises of AEDP are consistent with the work of Bridges (2005), who has empirically demonstrated that the successful processing of high-arousal intense emotions is marked by a sudden drop in heart rate and the emergence of a state of peaceful calm in which integration reaches its highest levels, both of which signal a shift to adaptive parasympathetic mediation. The regulation of high arousal negative emotional states leading to low arousal positive emotional states -- the latter marked by low cardiovascular requirements and engagement in social and meaning making activities -- is precisely the strategy that, as Tugade and Fredrickson (2004) rigorously demonstrated, characterizes highly resilient individuals. It is noteworthy that through AEDP's method of (a) experientially processing intense negative emotions to completion and (b) metaprocessing the positive emotional experiences associated with therapeutic transformational experience until core state is reached, maximally adaptive organismic strategies are activated and resilience naturally emerges where it was previously

severely compromised. Thus, the treatment of complex PTSD with AEDP not only strives for symptomatic relief but actually addresses the havoc that trauma wreaks at the core, attending to not just function, but also joy, aliveness, relational connection and effectiveness.

An Integrative Comparison of AEDP and PE

Exposure techniques can be seen as inherently embedded within ExTs in general and AEDP in particular. From deep engagement with avoided emotional and relational experiences (e.g., grief or intimacy), to experiential confrontations of past perpetrators or encounters with disowned aspects of the self, experiential approaches foster direct and immediate contact with feared internal and external experiences that limit patients' functioning (Elliott & Greenberg, 1997; Fosha, 2000; Lamagna & Gleiser, 2007). Correspondingly, AEDP's focus on immediate, here-and-now affective experiencing is embedded in PE's intensive therapeutically-guided engagement with traumatic memories. However, along with these shared features, AEDP and PE also have important differences. We will center our discussion of these differences on five domains particularly relevant to the treatment of complex PTSD (Ford et al., 2005): the therapeutic relationship, fear and anxiety, affect regulation, emotional processing, and dissociation (see Table 1).

The therapeutic relationship. The PE therapist, serving as a guide to safely confronting fear and to thinking more rationally, relies on the implicit operation of the non-specific factors of the therapeutic alliance (e.g., providing hope, moral support and encouragement in a respectful manner) to enable the patient to feel safe enough to manage the distress and vulnerability involved in prolonged, intensive re-living of trauma memories.

By contrast, AEDP interventions seek to "make the non-specific factors of treatment treatment-specific" (Fosha, 2000, p. 222) by making them the focus of specific interventions. AEDP relational interventions seek to systematically co-create a secure attachment. This happens, in part, through the therapist's commitment to sensitively and persistently helping the patient to feel safe, *a fortiori* in the face of intense core perceptions, thoughts, intentions, and emotions. In AEDP, the therapeutic relationship is not solely defined by therapist factors (i.e., what the therapist gives), but also by patient's experience (i.e., what the patient receives). Whereas in PE, the ability to trust the therapist and submit to inherent vulnerability is taken for granted, in AEDP, they are the focus of ongoing assessment, and explicit intervention. Relational connection is co-created, continually assessed, tracked moment-to-moment, and experientially processed (Fosha, 2000).

Thus, AEDP's explicit focus on developing and sustaining secure attachment in the therapeutic relationship may provide a basis for preventing several potential negative reactions to PE, including: dropping out of therapy; passively or dissociatively complying with a more powerful other (e.g., inadvertently re-enacting past traumatic experiences of coercion in therapy); enduring in isolation and silence high levels of unarticulated fear, shame and aloneness (e.g., inadvertently re-enacting traumatic experiences of abandonment or betrayal); and/or actively or passively resisting engaging in the exposure task (e.g., inadvertently re-enacting struggles to resist victimization and thereby reinforcing a sense of failure for being a "bad" person or patient). AEDP's focus on establishing and maintaining secure attachment in the therapeutic relationship -- *and assessing it through exploring the patient's fluctuating experience of it moment-to-moment*-- explicitly addresses the implicit assumption in PE that the patient can trust

the therapist to ensure that therapeutic interactions are safe and promote the patient's well-being and autonomy, which is something that patients with complex PTSD rarely feel.

Fear and anxiety. PE's principal aim is the reduction of trauma-based fear and the restructuring of emotional memory templates that maintain cognitive and behavioral avoidance strategies. Fear, and the strategies used to avoid it, are equally central to AEDP's understanding of how to work with patients with complex PTSD (Fosha, 2003; Lamagna & Gleiser, 2007). However, AEDP views fear through the theoretical lens of attachment. Conceptualizing attachment as "a phylogenetically programmed propensity" (Carter et al., 2005, p. 4) evolved precisely to counter fear and protect against danger (Bowlby, 1988; Main, 1999; Hesse et al., 2003), AEDP posits that a secure attachment relationship is essential for the moment-to-moment regulation of intense emotion, and all the more so when intense fear is the issue. "In the presence of a trusted companion, fear of situations of every kind diminishes; when, by contrast, one is alone, fear of situations of every kind is magnified.... It follows that the degree to which each of us is susceptible to fear turns in great part on whether our attachment figures are present or absent." (Bowlby, 1973, p. 210).

AEDP distinguishes between anxiety, a State 1 phenomenon, and fear, a State 2 phenomenon. It conceptualizes anxiety as a reaction that arises in response to the emotional aversiveness of dysregulated emotions and lapses in dyadic affect regulation. Anxiety regulation is achieved through a variety of interventions, dyadic and otherwise, which allows the shift from State 1 to State 2. AEDP then further distinguishes between, and aims to correct two kinds of fear: (1) the fear which results from primal terror of aloneness in the face of danger (i.e., a fear which is a crucial component of the unbearable states of aloneness); and (2) the fear associated with specific unprocessed traumatic experiences and memories (i.e., a State 2 core adaptive emotion). An AEDP therapist works to reduce the first kind of fear through an attachment-based stance and relational strategies that seek to increase safe relational contact and security, and the second kind of fear through experiential/somatic/emotion processing strategies that endeavor to process fear (and other dysregulated but potentially adaptive emotions that become associated with unresolved trauma) until its adaptive aspects come to the fore.

By contrast, the theory of emotional processing invoked as a rationale for PE does not distinguish between reduction of secondary distress/anxiety associated with re-experiencing the traumatic memory and related emotions, and the regulation of the core fear contained within the memory itself (an adaptive response to threats to one's life, safety, or self-integrity). There is accumulating evidence that, indeed, different physiological and phenomenological mechanisms are at work in anxiety, separation distress, and fear (Panksepp, 1998; Paulus & Stein, 2006; Stein, Simmons, Feinstein, & Paulus, 2007; Street & Barlow, 1994). The implications of this evidence is that reducing the fear derived from traumatic experiences is not necessarily sufficient to enable the patient to regulate anxiety and other forms of distress experienced as a result of having been alone and/or unable to avoid, escape, or prevent the persistent re-experiencing of terror that is the hallmark of PTSD. PE assumes that fear reduction will automatically achieve anxiety regulation, where AEDP assumes that anxiety regulation and emotional processing are different processes, which requires specific therapeutic interventions that include but are not limited to fear reduction strategies.

Emotion regulation. Affect dysregulation is inherent in PTSD, particularly in the more complex forms that involve cyclical extremes of disturbing intrusive imagery accompanied by floods of unmetabolized affect, and avoidant states of overly constricted emotional experience (Herman, 1992a, b). Dysregulated affect reinforces *conscious avoidance* (e.g., PTSD's avoidance or hypervigilance symptoms) as the sole survival strategy when faced with fear (particularly in the form of intrusive re-experiencing symptoms) and *unconscious avoidance* (e.g., PTSD's emotional numbing or dissociation symptoms) as the sole survival strategy when fear cannot be managed and emotion regulation breaks down. Emotion regulation requires that affect is contained within a band of tolerable feelings, (e.g., Cornell & Olio's [1991] "affective edge"). AEDP explicitly focuses on achieving and maintaining this affective edge through interventions designed to enable the patient to attain a level of emotional *experiencing* that is full, vital, and authentic, but not so disorganizing or terrifying as to trigger dissociation or panic. AEDP addresses the centrality of affect regulation on various levels.

The AEDP therapist is unequivocally and actively emotionally engaged, understanding that this requires ongoing tracking, active attention, and frequent repair in order to enable the patient to move from defensive reactivity to core emotion awareness (Fosha, 2003; Fosha & Yeung, 2006). AEDP therapists intervene to help patients down-regulate floods of pathogenic affects (despair, shame, helplessness, panic), and help master adaptive affects (anger, joy, sadness, fear), just as "good enough" (Winnicott, 1965) parents do for distressed children. Over time, a key goal of AEDP is to enable patients to trust that although therapy is painful, it will not overwhelm them. Or, even when it does feel momentarily overwhelming, it can be gotten through. Furthermore, they gain a gradual sense of mastery, especially as meta-therapeutic interventions (Fosha, 2000) highlight and heighten their growing internalized capacities for self-regulation and engagement with previously dreaded feelings.

Although Foa and Kozak's (1986) theory of emotional processing is founded on the premise that adequate emotional engagement with feared memories must take place, there appears to be no specialized interventions for facilitating such experiences within the exposure paradigm. PE assumes that patients can respond on command to the prompt to narrate their traumatic memories in great detail, maintaining their own affective edge, and does not use emotional or somatic cues to track or modulate affect aside from subjective self-reports of distress. Aside from the therapist's requesting more sensory detail to foster engagement, or asking that patients relive memories with their eyes open instead of closed to modulate the vividness of the imagery, little emphasis is placed on affect regulation. In fact, stopping the exposure exercise is thought to collude with avoidance and underestimate the patient's ability to survive the feelings; emphasis and even pressure may be placed on the patient to continue to vividly re-experience the traumatic memory regardless of the patient's affect state. Therefore, patients able to benefit from PE are those with sufficient internal affect regulation skills, while those without are likely to resort to old, automatic defensive strategies. Highly dysregulated patients may be referred to an adjunctive, cognitive behavioral skills-training therapy, such as Linehan's Dialectical Behavior Therapy (Linehan, 1993) or Cloitre's STAIR (Cloitre et al., 2002) in order to bolster affect regulation capacities, but as of yet, affect regulation, and even less (if possible) dyadic affect regulation, is not an integral part of PE.

Emotional processing. Developmentally adverse interpersonal trauma (Ford, 2005) is associated with complex emotional templates that extend far beyond fear networks, though fear is certainly a central organizing framework. Rage, grief, shame, guilt, helplessness and horror can also tangle in massive knots of “stuck” affective patterns, carefully masked by protective avoidance and dissociative processes. Such emotion schemas (Elliott, Davis & Slatick, 1998) shape and ultimately disrupt survivors’ relationships, sense of self, beliefs about the world (Janoff-Bulman, 1992), and often manifest in diffuse, undifferentiated distress, as opposed to neatly organized, distinct emotions or feeling-states.

Foa’s theory of emotional processing of fear (Foa & Kozak, 1986) is a very economical model that focuses exclusively on fear-related arousal. For an adult survivor of a single sexual assault by a stranger, high functioning prior to the assault, and presenting with pure PTSD, the theory may fit well, and PE may be effective in resolving anxiety symptoms. But for a survivor of repeated familial abuse, with comorbid diagnoses, characterological damage, disorganized attachment, and chaotic lifestyle patterns, an isolated trial of PE may be as effective as tugging on a tangled knot: the result will be a tighter, more entangled mass, compounded by more frustration and despair that no help is forthcoming. PE is predicated upon the patient having a low level of defensiveness and a high level of motivation in order to tolerate the initial high levels of distress, as well as enough affect regulation skills to keep emotional arousal in the moderate range. Extreme numbing or affective flooding, or emotions reflecting active protest (e.g., anger) present considerable obstacles to the engagement in and successful completion of PE (Foa, Riggs, Massie, & Yarczower, 1995).

Greenberg and Pascual-Leone (2006) outline a multi-tiered theory of emotional processing. The domains they describe—emotional identification/awareness, emotional regulation, active reflection on emotion (meaning-making), and emotional transformation—are addressed specifically in AEDP (Fosha, 2000). Moment-to-moment experiential and somatic tracking help patients attend to and express distinct emotional experiences (e.g., discerning bodily-rooted correlates of anxiety from anger, or fear, or shame), while building their own nascent self-monitoring capacities. Interventions range from encouragement and permission to allow feelings to arise, to evocative experiential portrayals to deepen adaptive emotional experiencing while simultaneously heightening arousal. The therapist plays an active role in disentangling adaptive emotions from maladaptive, secondary or pathogenic emotions (Fosha, 2002; Greenberg & Pascual-Leone, 2006), harnessing the former and regulating or transforming the latter.

AEDP capitalizes on the notion of using emotion to transform emotion, a concept described by Greenberg and Paivio (1997). For example, the experience of intense anger, if regulated and processed to completion, can be empowering, eventually releasing self-protective impulses that transform helpless, fearful, victim-centered self-schemas and emotions into confident, competent, powerful self-schemas and emotions. This diverges significantly from the assumption in PE that repeated exposure to a feeling will automatically resolve it. This may be true for some emotional experiences for some individuals, but certainly not all. A study by Jaycox and colleagues (Jaycox, Foa, & Morral, 1998) confirmed that, while arousal and extinction are key elements of fear resolution, they do not unfold naturally and spontaneously for

all individuals. Some patients cannot evoke enough arousal in response to a verbal command to recite or relive a memory, while others are activated but do not achieve reduced arousal.

PE equips a trauma therapist with two basic tools, a structured approach to confronting fear-evoking memories and encouragement to the patient to persevere until anxiety dissipates. AEDP broadens this toolbox to encompass not only engagement with and desensitization to *all* adaptive emotional experiences and impulses, but also regulation, soothing, restructuring, transformation and meaning making. Furthermore, PE remains in the realm of actual events and memories, while AEDP taps into subjective and somatically based experience, narrative and fantasy domains to allow the story to come out differently. This allows patients to venture beyond the actual trauma memory to new experiences of power, mastery, and transformation.

Dissociation. PE presumes access to traumatic memories and affect upon demand, which is unfortunately not the case with many trauma survivors, particularly those who exhibit dissociative and repressive symptomatology (Putnam, 2003). Dissociation is a fragmentation of subjective experience that may occur in the wake of trauma (Steele, van der Hart, & Nijenhuis, 2005). An effective treatment model for complex traumatic stress disorders must be able to address dissociation, including extreme forms such as dissociative identity disorder (Ford et al., 2005; Lamagna & Gleiser, 2007; Warner, 1998). PE makes no provisions for moderate to high levels of dissociation, such as derealization or switching ego states, both of which may obstruct access to emotional and autobiographical material. PE also presupposes traumatic memories are available to conscious thought and can be organized with sufficient coherence to form a complete multimodal (cognitive-relational-somatosensory) narrative. Dissociation fundamentally compromises these basic conditions. Thus, a prerequisite to conducting PE with a dissociative patient is for the therapist and patient to be able to anticipate and prevent, or recognize and ameliorate, dissociation.

Experiential therapies address dissociation by viewing personality through the lens of multiplicity to begin with (Elliott & Greenberg, 1997): within the range of normal development, the self is viewed as multi-faceted and multi-voiced. AEDP enables the therapist to actively monitor, comment on, and converse with the patient about dissociative states in terms of the core emotions embedded in these states, both as dissociation occurs and afterward. The focus is not on pressing forward with a predetermined therapeutic task, but instead on engaging the patient as an active collaborator who can observe and gradually come to understand dissociation as a form of self-protection that may not be necessary if core emotions can be safely accessed and modulated with the help of the therapist. As hard as it is to stay focused on re-experiencing trauma memories, it can be even harder to stay focused on core emotions when terror or helplessness precipitate dissociation. AEDP is just as rigorous as PE in discouraging avoidance, but does so by persistently engaging the patient in the work of paying attention to and understanding core emotions rather than treating consciousness as a given or dissociation as either an avoidable impediment or an indicator of therapeutic unsuitability or failure.

Furthermore, a new variant of AEDP, called *Intra-Relational AEDP* (Lamagna & Gleiser, 2007), imports relational and experiential interventions into the fragmented intrapsychic worlds of patients with extreme dissociative symptomatology, including dissociative identity disorder. The relational and affect regulating techniques that AEDP uses to deepen the patient-therapist relationship are brought into the internal world of the patient in the form of experiential inner

dialogues, and are used to enhance increased coordination between previously dissociated and conflicting ego states.

Implications for Clinical Practice and Research

In this paper, we have explored conceptual and clinical similarities and divergences between prolonged exposure (PE), a behavioral therapy, and AEDP, an experiential therapy, in their respective approaches to the treatment of complex PTSD. While a key similarity is the fundamental role assigned to intense but safe experiencing of fear in the process of change, the differing conceptualizations of fear lead to different intervention strategies and differently conceptualized goals. In PE, avoidance of the fear associated with specific trauma memories is considered the locus of PTSD's debilitating anxiety; thus, voluntary and complete re-experiencing of those memories is the therapeutic objective. In AEDP, the dysregulation of attachment and of emotional processing of trauma are seen as leading to pervasive and persistent difficulties that include PTSD, but also may encompass dissociative self-fragmentation and compensatory protest or resignation. Therefore, in AEDP, regaining the capacity for organized attachment and emotion processing by the voluntary and complete experiencing of core emotions in the context of an affect regulating dyadic relationship is the therapeutic objective.

Each way of framing the therapeutic task and objective has advantages and disadvantages. Fear reduction through prolonged exposure is efficient and readily understood by both patients and therapists. Furthermore, its singular and bounded focus on engagement with specific and circumscribed traumatic memories can be reassuring and containing for certain patients. For others, however, trauma memory re-experiencing during PE may be blocked by, and/or may inadvertently exacerbate, an inability to (a) sufficiently trust the therapist and the process (i.e., an absence of secure attachment working models) or (b) regulate distressing emotions (i.e., emotion dysregulation). In such cases, PE therapists may consider integrating some of the dyadic and affect regulatory strategies of AEDP. Active therapeutic assessment of patients' attachment history, of their ability to engage in a mutual, trusting relationship with the therapist, as well as of their affect regulatory capacities and possible dissociative symptomatology -- prior to PE and, optimally, in an ongoing way as treatment unfolds -- could potentially help circumvent some of these pitfalls. Then, therapists could incorporate interventions to enhance attachment security and engage emotion processing with patients who manifest such deficits, so that they do not become roadblocks or negative prognostic factors for prolonged exposure.

The therapist's stance and role are also quite different in PE and AEDP. Where PE therapists are directive and educative, AEDP therapists are fostering and collaborative. Here too, potential benefits and pitfalls come with each role. PE lends itself to briefer treatments in which the therapist expertly teaches and coaches the patient in order to empower the patient with knowledge and skills. This stance may inspire confidence, security, and ultimately a sense of accomplishment and self-efficacy. But it also may not, as there is no systematic evaluation of the patient's actual subjective experience. The PE therapist also may inadvertently confirm the patient's harmful beliefs about self and others as a result of the built-in power differential between therapist and patient. Such subjective experiences clearly are unintended, but unless explicitly explored, could severely undermine therapeutic success.

AEDP by contrast is likely to require lengthier treatment in which the therapist gently but firmly engages the patient in an experiential dialogue aimed at sharing the patient's distress, with the ethos that previously feared to be unbearable emotional experiences can be regulated under the aegis of a secure attachment. This stance may inspire the hope, courage, and sense of authentic connection that are the opposite of post-traumatic aloneness and despair. However, the AEDP therapist also may inadvertently encourage the patient to reach for or expect to find a deeper sense of security and meaning than some patients either have the resources (psychic or financial) to achieve or necessarily need in order to manage and live successfully. Furthermore, AEDP's emphasis on relational and emotional interventions and its process driven approach may underestimate the potential and necessity of structured in vivo exposure to counter the habitual, lifelong avoidance patterns of lower functioning patients and severely mentally ill individuals. In this area, PE's in vivo strategies could help translate and generalize AEDP's internal gains and transformations into patients' everyday lives.

In addition, while the studies of Paivio and colleagues (Paivio & Nieuwenhuis, 2001; Paivio et al., 2001, 2004) document the reduction in PTSD symptomatology as a result of experiential interventions shared by their EFTT approach (Emotion-Focused Therapy for Trauma) and AEDP, there is a need for empirical studies before it can be stated with confidence that AEDP effectively reduces complex PTSD symptoms. The modest empirical validation to date warrants careful and explicit consideration in treatment planning and in introducing AEDP as a therapeutic option to prospective patients with chronic trauma histories. In fact, despite robust support for PE for PTSD, more empirical studies are necessary to document its effectiveness in the realm of complex PTSD and DAIT (Ford, 2005) as well.

Until recently, the closest example of an integration of PE with a therapy model consistent in some ways with AEDP (although without the specific attachment-focus of AEDP) has been Cloitre and colleagues' (2002) STAIR-PE, in which a combination of educative/skills training and relational interventions were provided prior to PE. More recently, Briere (2006) has proposed a "Self-trauma model" as an approach integrating relational schemas and affective regulation into a graduated exposure paradigm. Briere's notion of a "therapeutic window" for achieving an optimal level of arousal is similar to the concept of dyadic affect regulation in AEDP. However, in contrast to AEDP's attachment focused relational interventions, Briere's model uses cognitive interventions around relational themes (e.g., identifying core relational schemas that are re-enacted within the therapy relationship). Integrative applications of PE and AEDP are needed in order to provide therapists with a range of approaches that can be adjusted to meet the needs and build upon the strengths of diverse individuals seeking treatment for complex PTSD.

Our consideration of the similarities and differences between PE and AEDP suggest several implications for research as well. Careful examination of how therapists actually conduct PE and AEDP, and which elements of each therapy promote healing, improved quality of life and/or symptom reduction could provide a basis for the kind of formative clinical research that Westen, Novotny, and Thompson-Brenner (2004) have described as "a shift from validating treatment packages to testing intervention strategies and theories of change that clinicians can integrate into *empirically informed therapies*" (p. 631, italics in original). Such therapy process studies could be additionally enriched by examining when and how therapists conducting

interventions from both models are able to provide fundamental ingredients for therapeutic change such as relational functioning (Park & Ai, 2006). The outcomes, both intra-therapy (e.g., working alliance, symptom reduction) and post-therapy (e.g., sustained remission from PTSD and comorbid disorders; enhanced socio-vocational functioning and quality of life), that are associated with different combinations of PE and AEDP interventions could be investigated both in open and randomized controlled clinical trials in order to move toward confirmatory research. All such research advances are predicated on an increasingly precise description of what therapists trained to conduct PE and AEDP actually do, how they do it, and the impact of their interventions on patients.

Conclusion

Behavioral exposure therapies, such as PE, and experiential therapies, such as AEDP, are approaches that at first glance may appear diametrically opposed from theoretical and clinical standpoints. Upon closer examination, real differences between the models' therapeutic stances and strategies remain evident, consistent with their fundamental conceptual emphases upon, respectively, conditioning-based fear reduction (PE) and attachment-based emotion regulation (AEDP). In this paper, we argued that AEDP's model of 1. attachment-based relational interventions, 2. dyadic regulation of emotion, and 3. a somatically grounded, holistic approach to full emotional processing, offers specific mechanisms, at present lacking in the PE protocol, to address complex PTSD factors such as attachment/interpersonal disturbance, emotional dysregulation, dissociation and identity diffusion. However, neither the apparent advantage in research support enjoyed by PE nor that of clinical and meta-theoretical complexity enjoyed by AEDP provide a necessary or sufficient basis for preferring one model to the other across the board. Our hope is that proponents of each model will find the description of the limitations of their model and the strengths of the other model to be a motivator for the development of creative hybrid approaches that may enhance both models—and most importantly, the effectiveness of their clinical practice with trauma survivors.

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Table 1

Comparison of Prolonged Exposure and Accelerated Experiential Dynamic Therapy for Complex PTSD.

	PE	AEDP
Structure of therapy	Therapist structured, task oriented, linear sequence, directive.	Client-centered, process-oriented, moment-to-moment tracking of emergent experience.
Objective of therapy	Extinction of trauma-related fears and avoidance behaviors.	Relief of PTSD symptoms; enhancement of relational functioning; increased resilience; coherent autobiographical narrative; enhanced well-being.

Emotional processing	Reduce fear and anxiety via fully activating fear structures until fear and avoidance are replaced by a sense of efficacy and ability to approach trauma-related cues and contexts.	Access, experience and process to completion a range of emotional experiences -- such as grief, fear, anger, helplessness, loneliness -- to release adaptive action tendencies. Co-create with dyad euthymic emotion states such as joy, hope, gratitude.
Affect regulation	Coaching to stay with distressing/fearful trauma memories until distress diminishes in intensity. Discontinue exposure if distress is intolerable.	"Dyadic affect regulation" via therapist attunement to client's affect states in order to serve as an attachment security anchor while also role modeling and guiding client verbally/nonverbally in modulating emotion valence and intensity.
Role of therapeutic relationship	Implicit supportive therapeutic alliance: therapist expresses hope and confidence in client's ability to overcome fear and relinquish avoidance. No specific strategies for therapist to address ruptures in the alliance or track client's subjective experience of the relationship.	Explicit relational focus by therapist on empathic validation of client's frame of reference and emotional experiencing: therapist expresses hope/confidence in the dyad's ability to help the client acquire a sense of trust in self and security in key relationships beginning with the therapeutic dyad. Explicit strategies for empathic meta-processing to repair of alliance rupture.
Treatment of dissociation	Therapist encourages client to regain focus on trauma memory or on current environment. No provisions for managing structural dissociation.	Specific "intra-relational" interventions to deal with compartmentalization, derealization, depersonalization and structural dissociation.
Empirical validation	Strong support of efficacy for reducing PTSD with selective clinical sub-groups, excluding most persons with complex PTSD or SMI impairment.	Preliminary support of efficacy of experiential therapy for child abuse survivors. No clinical trials of AEDP. Extensive clinical evidence of effectiveness.