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The Comprehensive Resource Model®: Overview of basic affects in adversity & effective treatment for complex reactions to trauma

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Abstract

Much of the theoretical focus in post-traumatic stress disorder has been on the role of the amygdala, the hippocampus and the prefrontal cortex. Crucially, in unresolved traumatic experiences that underlie clinical presentations, this focus misses the brain areas key to the defence responses of fight, flight and freeze—and the associated affects of anger, fear and grief. The periaqueductal gray in the midbrain, with the hypothalamus, is essential for these somatic and emotional responses to traumatic experiences. We argue that when treatment approaches thought to work at the higher brain levels have been ineffective, it is because they have failed to engage the midbrain and hypothalamic sources of the affective responses to the trauma and to the memory of it. Basic affects have been so overwhelming that dissociation, or a similarly protective neurochemical capping mechanism, has prevented full resolution of the affective content of the adversity. Treatment with the Comprehensive Resource Model[®] (CRM) aims to clear the clinically relevant residues of adverse experiences by resolving the emotional responses accessed through the body memories. When the trauma has led to overwhelming distress, and/or dissociation, there is a necessity for robust resourcing to be in place before the emotional intensity of that distress is accessed. Resourcing needs to be as proximal to the re-experience as possible to promote complete resolution and in some psychotherapy modalities, the supports provided are somewhat remote from the crucial moments of processing. Therefore, we describe how the CRM seeks to have robustly resourced states present concurrently with traumatised states to avoid overwhelming emotional distress. This allows safe entry into the deepest pain residual from the traumatic event so that it is not overwhelming during processing of the memory, and does not lead to further dissociation, allowing the individual to remain fully present throughout. This "stepping into the affect" can then be so rapidly effective that we also argue that CRM is not an exposure treatment; re-orientation to the deepest content of the experience resolves the residual distress quickly and permanently through memory reconsolidation. Re-learning at upper brain levels will then follow from the revoking of the affective power, which has previously driven stimulus/context and response learning in the amygdala, hippocampus and prefrontal cortex.

KEYWORDS

basic affects, Comprehensive Resource Model, memory reconsolidation, midbrain, psychological trauma

1 | BACKGROUND

The proposed ICD-11 diagnosis of complex post-traumatic stress disorder (CPTSD) takes into account not only the re-experiencing, avoidance and hypervigilance of post-traumatic stress disorder (PTSD) but also the "persistent and pervasive" (Matheson, 2016, p. 331) impairments in emotional and relational functioning, and the impact of these on the experience of the self. CPTSD is a severe condition, with long-lasting implications for many domains of a person's life, for which existing treatments are often ineffective and inadequate, contributing to therapeutic nihilism for a severely ill group of people (Hull, Corrigan, & Curran, 2016).

Research into therapeutic modalities has been restricted by the dominance of cognitive and behavioural approaches, even when these have proved unsatisfactory for improving the outcome in many clinical presentations (Corrigan & Hull, 2015a,b, 2018; Matheson, 2016). The rationale for these approaches has been derived from animal models which have focused on fear learning. These have largely centred on; the amygdala for stimulus learning; the hippocampus for contextual learning; and the prefrontal cortex for integration of multi-sensory inputs and regulatory outputs to subcortical and brainstem areas. Modulation of activity in these regions has been preferentially studied in neuroimaging of PTSD (Hull, 2002). The focus has been on fear learning, yet simultaneously neglecting the situational fear that prompted the learning; behaviour has been viewed as observable and measurable, with emotions neglected as less measurable, and more difficult to study. A clinical model can of course be effective even when the underlying theory has significant neuroscientific limitations, but there is a paucity of outcome studies for CPTSD, with some concluding that fewer than half of sufferers got better (Gapen et al., 2016), and others reporting that treatment, even when successful, has a protracted time-course (Brand et al., 2012). Those treating complex PTSD, which often has its origins in infancy (Lyons-Ruth, Dutra, Schuder, & Bianchi, 2006), and early childhood, will recognise the need for other approaches to be developed and researched.

In the Comprehensive Resource Model® (CRM; Schwarz, Corrigan, Hull, & Raju, 2017), there is a focus on the basic affects, such as fear, that occur at the time of a traumatic experience, as these are considered to make the event memorable (McGaugh, 2013). We argue that the traumatic experience is distinguished by an intense affective response that has not resolved. It is truncated in a way which can lead it to keep recurring, when triggered by internal or external cues, without ever being fully completed. This echoes the theory of Pierre Janet who proposed that past traumatic events

led to split parts of the personality holding subconscious fixed ideas that expressed themselves through clinical symptoms (cited in Ellenberger, 1981, pp. 331-417). Janet's work was developed extensively for the understanding and treatment of dissociative disorders by Van der Hart, Nijenhuis, and Steele (2006), who noted that traumatised parts of the self-expressed not only defence responses relevant to the original trauma, but insecure attachment action tendencies. In their analysis, events are potentially traumatising when they include peritraumatic dissociation, vehement emotions and hyperarousal, hypoarousal, the assignment of meaning to the adverse experiences, and an insufficient degree of resilience or preparedness of the individual (Van der Hart et al., 2006). CRM covers all these eventualities as it works with the moment of intense affect before defensive action tendencies are expressed, or have their expression obstructed or curtailed, and before there is peritraumatic dissociation, whether from a high or low arousal state. It has been argued (Lanius, Paulsen, & Corrigan, 2014), that peritraumatic dissociation through neurochemical capping of extreme distress is likely to occur before other forms of dissociative protection of the traumatised self. CRM considers that clearing the painful affective residues of past adversity eliminates the need to work on obstructed defence responses, because those affective residues are at a more fundamental brain level than the emotionally charged motor memories and other emotional learnings. For instance, when the body's tension pattern associated with a trauma memory indicates a blocked urge to push away an assailant or to flee, it is the terror that is the target for treatment; clearing that fear dispels the motor tendency without need for specific attention to the movement impulse. The affect generated by the midbrain and hypothalamus is a deeper and more fundamental part of the trauma memory than the defence response loop held in a subcortical circuit through the basal ganglia (Corrigan, 2014b), which can be cleared of its movement components without resolution of the associated emotional distress.

1.1 | Basic affects

From a corpus of animal research, Panksepp proposed that every mammal had seven basic affective systems; SEEKING, RAGE, FEAR, GRIEF, PLAY, LUST and CARE (Panksepp, 1998; Panksepp & Biven, 2012). These can be elicited in animals even when their cortex has been removed as the basic affects have their roots in subcortical and brainstem structures. Key areas are the midbrain, which is in the upper brainstem, and the hypothalamus, as shown in Figure 1. The periaqueductal gray (PAG) in the midbrain has been extensively studied in animal models of defensive responding to threat

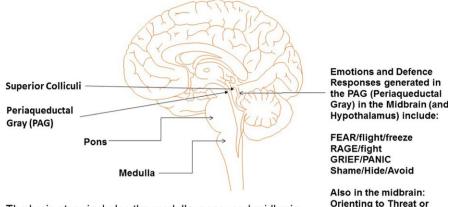


FIGURE 1 Traumatic experience and the brainstem

The brain stem includes the medulla, pons, and midbrain.

Safety – the Superior Colliculi

(Motta, Carobrez, & Canteras, 2017), making it, in the authors' opinion, impossible to have a coherent and comprehensive theory of post-traumatic clinical disorders that does not acknowledge its importance. The hypothalamus, just above the brainstem but also below the cortex, is interconnected with the PAG for defensive behaviours and the autonomic nervous system changes associated with them (Wang, Chen, & Lin, 2015). The basic affects of fear, rage and grief are generally considered negative emotional experiences, and individuals with PTSD typically have intrusive memories that elicit one of these three. There may also be shame, which cannot be readily studied in laboratory animals but is often a painful reminder of an event from which there was a wish to hide (Corrigan, 2014a; Corrigan & Elkin-Cleary, 2018). In the dissociative subtype of complex PTSD (Frewen & Lanius, 2015), these emotional responses may be suppressed, as the individual has learned early in life to disconnect from body awareness, to numb out the horrors of their reality. Nevertheless, the intensity of the affective responses has been suppressed rather than eliminated, so that treatment which enables the person to connect again with their body awareness, may lead to an increase in manifest distress. This is the reason for therapeutic approaches to re-embodiment (Fay, 2008) needing to be careful and measured. In CRM, numbness, depersonalisation, derealisation and alexithymia are seen as blocks to healing, which are explicitly addressed early in therapy (Schwarz et al., 2017).

The dissociative subtype of PTSD describes individuals with prominent derealisation and depersonalisation, and who respond to hearing a script of their trauma narrative with no increase in heart rate. This differs from those with the re-experiencing subtype of PTSD (Frewen & Lanius, 2015), in whom intrusions, nightmares and flashbacks are prominent. Those with the dissociative subtype are found to have an increase in activity in the medial prefrontal cortex and anterior cingulate cortex, while those with the re-experiencing profile show reduced activity in these same brain regions. This distinction is important as the prefrontal cortex modulates activity in areas such as the amygdala, hippocampus, hypothalamus and PAG. Therefore, if the PAG is as important as proposed here, its connectivity would also be different in post-traumatic disorders and their subtypes. Opposite directions of activation, for example in the

prefrontal cortex, may have had a neutralising effect on results in neuroimaging studies which did not stratify into dissociative and re-experiencing subgroups because they were carried out prior to this definition.

The resting-state connectivity of the PAG with other regions of the brain has been studied in individuals with PTSD and its dissociative subtype (Harricharan et al., 2016). Compared with controls, the PTSD groups have widespread functional connectivity of the PAG with cortical areas such as the anterior cingulate cortex and the orbitomedial prefrontal cortex. Subsequent study of the direction of connectivity between the prefrontal cortex, the amygdala, and the PAG (Nicholson et al., 2017), confirmed major differences between the subgroups of PTSD. The re-experiencing subtype has bottom-up connectivity from the amygdala and the PAG to the ventromedial prefrontal cortex (VMPFC), whereas the dissociative subtype has the opposite pattern; enhanced top-down connectivity from the VMPFC to the amygdala and PAG (Nicholson et al., 2017). These findings confirm not only the importance of the PAG, but the clinical relevance of the subtype discrimination; the dissociative group has learnt to shut down the body and emotion awareness which was so painful during the developmental years.

1.2 | Treatment implications

The empirical recognition that exposure treatments are contraindicated in complex dissociative disorders (Chu et al., 2011) fits with
the neuroimaging findings. When the developing brain is struggling
to find ways to survive and to appear normal in different contexts,
it becomes adept at compartmentalising experiences. Traumatic
events can be stored in separate memory systems (Corrigan, 2014b),
so that the child can, for example, appear normal during the day at
school despite being subjected to horrors at home in the evenings.
During the day, the child may well be amnesic of events occurring at
home, but aware of dread at particular times of the day or in particular environments. Thus, the dissociative subtype of PTSD develops
with an extensive ability through the prefrontal cortex to shut down
emotions and affectively charged memories, which could otherwise be overwhelming and incapacitating. Any exposure treatment

utilising a fragment of memory will be ineffective when an extensive history of trauma has resulted in prominent amnesia, derealisation, depersonalisation, identity confusion and identity alteration. One or more of these symptoms may be present in PTSD (DSM5; APA, 2013); dissociative disorders (DSM5; APA, 2013); or CPTSD as proposed for ICD 11 (Cloitre, Garvert, Brewin, Bryant, & Maercker, 2013). At best, there will be new learning of a top-down control from the prefrontal cortex to the amygdala and hippocampus (Marek et al., 2018), extending the suppressive tendency already manifest in the brain. While there are frequently intrusive images, memories, thoughts and body feelings even in the dissociative subtype, extending the top-down control is short-term management of symptoms rather than healing.

For healing to occur, memories have to be cleared of the distress they carry. This erasure is achieved through memory reconsolidation when the distress memory is reactivated, and a mismatch is juxtaposed (Ecker, Ticic, & Hulley, 2012). For this to happen in complex PTSD, in which the distress memories have been so intense that they have often been dissociated from full awareness, there needs first to be; psychoeducation about complex PTSD, a restoration of body awareness, and the learning of new and safe strategies for the regulation of affects so that they can be experienced and cleared. CRM provides highly effective ways to work that are in keeping with guidelines for the treatment of complex PTSD, both local (including The Matrix, 2015) and international (for instance, Chu et al., 2011). These are outlined below.

2 | CRM FOR COMPLEX PTSD: INCLUDING THE DISSOCIATIVE SUBTYPE

2.1 | Assessment, formulation and case conceptualisation: development of the therapeutic relationship

Like most other psychotherapeutic modalities, CRM recognises the importance of a safe, contained, boundaried and empathic therapeutic relationship. There is an additional emphasis on somatic attunement; the therapist being as aware as possible of changes in the level of activation within the person's body. In the early stages of therapy, when the presenting complaints are being evaluated in terms of the history, and a case conceptualisation is being formulated, the CRM therapist will attend to the level of activation in the patient/client and bring in resources to help the person tolerate often highly uncomfortable sharing of the history. Almost immediately, there will be the use of breathing sequences; for grounding from dissociation (CRM earth breathing), for centring and self-coherence (CRM ocean breathing), for release of intense affect (CRM fire breathing) and for the introduction of physiological correlates of kindness and compassion (CRM heart breathing) (Schwarz et al., 2017). CRM trainings specifically address a range of blocks to healing, including inability to bring awareness to the breath without being triggered; only the basic outline can be provided here (Schwarz et al., 2017).

Recognition that symptoms are the result of adversity in life, and that the clinical consequences can be treated at source, tends to promote collaboration in the therapeutic process; healing can be achieved within the person rather than being imposed by another. Blocks to healing are seen as having been protective mechanisms that have outlived their justification in events and circumstances that are no longer present. There may be layers of defensive responses that have developed over the initial wounds to protect them from being reactivated and their pain exacerbated. To allow progress, it is necessary to resource all parts of self that fear being emotionally and psychologically overwhelmed or have been inaccessible because of a dissociative response. Much painstaking work will be needed to finally get to the origin—the "root"—of the distress that has necessitated the adaptive emergence of symptoms and syndromes.

2.2 | Affect dysregulation, structural dissociation and somatic symptoms: individual psychoeducation, safety and emotion regulation

Traumatised individuals readily access younger self-states within a CRM session, and initial education may involve an introduction to the mechanisms by which traumatic experience leads to structural dissociation (Van der Hart et al., 2006). There is often a process of getting to know different parts of the internal system, as in other models (Fisher, 2017; Schwartz, 1995). In CRM, the self-states or parts may be resourced separately, for example, with their own helper animals and their own Special/Sacred Place, although the aim is always towards greater co-consciousness, internal communication, and co-operation among parts of the self. In CRM, all parts are considered to have come into being for protective reasons so all are considered important. This resourcing of the self-state or emotional part may be so effective that the part feels able to process the distress at its core relatively early in the course of treatment. Thus, in CRM, memory processing followed by integration can happen even at the stage of safety and stabilisation. The effectiveness of the resourcing allows a careful titration of approaches to the most painful trauma memories, as the individual quickly realises what is possible in therapy.

2.3 | The processing of traumatic memories

Traditionally, the second phase of the phase-based intervention model, attention to intrusive trauma memories, can be neglected by clinicians with no effective means of achieving the necessary processing. Psychotherapists trained in CBT have been found to be reluctant to use imaginal exposure (Becker, Zayfert, & Anderson, 2004), while Rosen et al. (2004) describe a discrepancy in clinical practice between what was considered best and what actually occurred. Attempting to achieve safety and stabilisation but not offering hope of deeper change thereafter seems inconsistent with a phase-based model. With some modalities, there may be an extensive period of safety and stabilisation, followed by an attempt at memory processing, which is nevertheless overwhelming for

the individual being treated (and potentially for the therapist). This may provoke uncontrolled abreaction, dissociative switching without co-consciousness, or an emotional overwhelm that makes both therapist and individual being treated disinclined to repeat the experience. As indicated above, memory processing in CRM can be achieved relatively early in treatment for those individuals in whom the resourcing is proving so robust, and proximal to the distress, that the memories can be directly addressed without the intrusion of incapacitating emotional dysregulation. In others, for example those with greater fragmentation of the self, more time is spent with mapping and resourcing of self-states.

Treatment with CRM can allow much more integration of the phases according to what memories are being addressed and how deep, in the sense of how far below the surface of awareness, is the distress associated with them. CRM often uses bilateral music, sound which pans gently from side to side, although it is not considered essential for processing. It does promote grounding, reducing the risk of dissociation, in some individuals, but individual responses are carefully assessed. Therapists trained in Eye Movement Desensitisation and Reprocessing (Shapiro, 2001) will be aware of a range of forms of bilateral stimulation, but the only bilateral stimulation used in CRM is with music through headphones. Crucially, eye movements are not used in CRM; instead fixed eye positions are utilised, an extension of the fixed and distress eye positions in the work of Vasquez (2013) and the One-Eye Integration work of Cook and Bradshaw (Bradshaw, Cook, & McDonald, 2011). Resources are anchored on eye positions so that the physiological state associated with the resource is kept active while the distress is being explored. CRM resources include therapist attunement, Special/Sacred Place, breathing, grids of points in the body felt by the individual, as linked to a required quality (such as being grounded or centred), attachment to animal, spiritual or natural connections, and the CRM Core Self. (The ultimate aim is that the attachment resource for any young self-state is provided by the adult, present-day self, but intermediaries are often needed in the early stages of treatment). Distress is also seen as a resource, as without it there would be no drive to change; to get better from however the distress is experienced. The use of most of these resources can be strengthened by associating them with gaze directions so that, physiologically at least, they are running concurrently and not lost during periods of processing.

Research is required to show how the therapeutic memory reconsolidation occurs in CRM. The Coherence Therapy view is that a schema mismatch is juxtaposed with the trauma memory so that deconsolidation is followed by erasure and reconsolidation (Ecker et al., 2012). The mismatch is seen as crucial, as it is in CRM. Extensive clinical experience with CRM leads us to propose that the mismatch may be physiological, for example, guiding the individual to breathe without pause through a part of the trauma memory in which the breath was frozen in an extended pause. We have also argued that stepping into the affect, becoming fully aware of the core of the emotional distress, while the part of self holding the memory is fully resourced, allows for a brainstem re-orienting that creates a mismatch (Schwarz et al., 2017). Intolerance of consciously experiencing two very

different, even opposite, emotional states creates a state of paradox, an integral part, and target, of CRM processing. For example, a child may equally be terrified of a perpetrator, but attached to that perpetrator (Ross, 1997) because physical survival depended on that connection.

The attachment resources used extensively in CRM provide physiological mismatch juxtapositions for self-states holding feelings of aloneness and abandonment—but it is the specific self-state which is resourced rather than the adult who has attended therapy. The present-day self may not feel alone in adult life so will not need the attachment resources required by, for example, a 5-year-old selfstate processing the memory of a sudden and inexplicable hospital admission and the attendant painful separation from family. Similarly, the 5-year-old self-state may feel more comfortable with processing the distress in its own special place rather than being vaguely aware of a place in which the adult feels safe. Resilience has a multidimensional character, so the resource effective for one self-state or in one domain is not predictably available when it is needed "now" in therapy. This can leave the individual floundering with excessive and uncontrolled activation, emotional overwhelm or dissociation when processing of the traumatic memories is attempted even after an extended period of stabilisation; in effect, the resource needs to match the requirements of the traumatised self-state. Following effective processing of trauma memories, the narrative of the episode or event can be recounted without any emotional distress-and this change is permanent. Effortless maintenance of the subsequent non-triggering of symptoms for the treated individual differentiates a memory reconsolidation therapy from the often temporary re-learning of exposure therapies (Ecker, 2017).

2.4 | Reintegration with others in life

As trauma memories are processed, and the triggering of residual emotional states from past experience no longer occurs, there is the potential for change in functioning in different areas of life, including through education or employment. Relationships may be more secure, or alternatively, remain rather uncomfortably based in insecure attachment patterns that have lost relevance when the assessment of the self is no longer based in the Locus of Control (Ross, 1997) or Locus of Loyalty (Schwarz et al., 2017) Shifts. New skills for interpersonal interaction based on healthy attachment from a secure base in the self may need to be learned and practiced; guidance, and trial and error relational behavioural experiments, will help. Physical health may improve as somatoform disorders resolve and some inflammatory conditions improve or clear. Any change from a previously lifelong pattern may be experienced as a loss, with attendant grief, and adaptation to the new interactions with the environment can be challenging. Attachment resources are especially important when the individual self emerges in a way that feels initially alien; they can also promote strength and courage in situations that feel new. There will not be the automatic engagement of fight/flight/ freeze responses, as the cortex is more able to stay on line to perform risk assessment in situations that would previously have triggered brainstem defence responses. Individuals are encouraged to use the breathing resources as they retain their capacity to ground the self in the present, to release body tension and emotional turmoil, and to promote care and nurturing of the self and others. Sacred/Special Places for the internally communicating parts of the self help maintain a sense of cohesion and security. In ego state terms, integration is achieved through the co-consciousness, communication, and co-operation of self-states, rather than through their disappearance; an aim that is reassuring to hurt parts of the self as they have worked to become unburdened; their disappearance is not the intention. Parts of self are not explicitly marked for integration, as they can then feel invalidated and threatened with destruction, although they often merge spontaneously into a unified whole as treatment progresses.

2.5 | Positive affects

The clearing of the negative affects associated with past events allows space for the emergence of positive affects. This is also dependent on present circumstances; it is impossible/inappropriate to achieve down-grading of the threat system from "red alert" if the environment remains dangerous and/or hostile. However, dealing with contemporary adversity from a nervous system which is now not carrying triggered responses to past events, especially if these were operating outside full awareness, is more straightforward, although still unpleasant. Empirical evidence has demonstrated that harsh environmental conditions evoke a negatively valenced state of the mesolimbic dopamine system (Reynolds & Berridge, 2008), while threats evoke associated defensive behaviours from the midbrain superior colliculi (Comoli et al., 2012) and PAG (Motta et al., 2017), as well as the hypothalamus (Wang et al., 2015). However, there is no translational neuroscience information about whether these structures can be sensitised by a lifetime of trauma, as appears highly likely from clinical observation, or whether they have particular thresholds that are largely invariable. Memory reconsolidation therapies are not dependent on re-learning from the prefrontal cortex to the amygdala, but the site in the brain of the deepest level of reconsolidation has not been defined. Clearing of negative affects intertwined with past events allows the reshaping of attachment patterns towards more security and more positivity. Characteristics of the securely attached adult include having a healthy balance between attachment and autonomy, a valuing of attachment, a tolerance of imperfection in oneself, an ability to seek emotional support when distressed, an ability to be in a relationship without fear of abandonment and a positive sense of self (Brown & Elliott, 2016).

2.6 | The impact of CRM on therapists

Trauma psychotherapy can be challenging for the therapist. Listening to descriptions of the ways humans can devise suffering for others, and obtain pleasure, gratification, and/or a sense of power and control from so doing, raises fundamental questions about being human. Even when the traumas have arisen through well-intentioned interventions, such as medical procedures that have gone wrong, the

therapist will have repeated exposure to the intensity of the emotional pain endured by traumatised individuals. Approaches that rely on being with and bearing witness to, individuals in their suffering, without any more active intervention, can lead to emotional exhaustion in the therapist, and a sense of therapeutic nihilism when change is slow, non-linear, or of questionable helpfulness.

This is also seen with techniques that are evidenced as effective but have a high dropout rate and are disliked by therapists trained in them (Corrigan & Hull, 2015a,b). Alternatively, when individuals find the trauma therapy modality acceptable and effective, and thus attend regularly, there can be a corresponding increase in therapist satisfaction. The CRM therapist also has access to resources which are part of the model and can use them personally at times of adversity or when they find themselves challenged during the therapy sessions they are leading. When the therapist discovers that working on the "ultimate cause" is possible, however challenging, but, with targeted CRM resources, both achievable and tolerable, their own fear of deep therapy work recedes. The inherent structure of CRM, based in case conceptualisation, actually permits creativity, and therapy becomes process—rather than content-driven, such that "successful sessions" are no longer simply about adherence to protocols.

Comprehensive Resource Model[®] therapists are challenged to work on their own issues so that they are less likely to encounter areas of bias or ignorance they are unaware of, triggers, and other unexplained changes in activation, when carrying out therapy for others. The somatic attunement which makes CRM optimally effective is best achieved when the therapist is mindful, regulated, and embodied—even when life outside the therapy session may not dispose easily to this ideal state. Having an understanding of what it means to process their deepest issues will reduce the incongruence between the clinician and the individual striving for well-being. Emotional/psychological health then becomes a continuing process of achievement for the therapist and the individual undertaking therapy. Nevertheless, the same principles apply; clearing of painful affects and conflicts is best achieved when there are adequate resources in place.

3 | CONCLUSION

With CRM, the aim of therapy is for the treated individual (and the CRM therapist) to have a secure relationship with self, that allows for the appropriate recruitment of interpersonal and social support, and affect regulation that is more resilient to being pushed beyond the threshold of what can be tolerated. That goal often only becomes available after the successful clearing of negative affect associated with intrusive memories: resolution of the need to avoid triggers; successful down-regulation of hyperarousal, and the unburdening of traumatised self-states; and the impairments in everyday functioning that often further complicate the lives of those with CPTSD. Nevertheless, the aim to attain a fundamentally healthy relationship with the self is a clear and worthwhile goal

within a resourced model which marks the therapeutic process as genuinely comprehensive.

Panksepp noted that "...few can ride the whirlwind of unbridled emotions with great skill". (Panksepp, 1998, p. 301). This describes attempts to control the "emotional turmoil" through "...top-down..." processes (ibid, p. 301). Therapy paradigms that seek to instigate top-down regulatory strategies ignore the quintessential truth that survival terror, arising in the brainstem, drives learning at the brain's higher levels. Thus, learning cannot be undone without attention to the brainstem origins of the response to the threat to life (Schwarz et al., 2017). CRM provides the necessary resources to navigate survival terror and unwelcome truths of one's life, without the therapeutic experience being re-traumatising through uncontrolled abreaction, dissociative switching and emotional overwhelm. CRM, as a comprehensive model, does not ignore the phase-based approach to the treatment of complex PTSD and other complex posttrauma reactions. However, crucially, within the CRM framework safety and stabilisation, resourcing, processing and integration are utilised throughout therapy; each component essential to the process, not linear, but intertwined and interdependent (Schwarz et al., 2017).

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