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Emotion Regulation in Complex PTSD: a brief literature review

Supervisor
Professor Ughetta Micaela Maria Moscardino

Candidate: Qinglin Zhang
Student ID number: 2105816

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Abstract

This literature review aimed to examine how emotion regulation difficulties may contribute to the maintenance of Complex PTSD symptoms. The thesis first reviewed the conceptualization and diagnostic characteristics of CPTSD, and subsequently examined potential mechanisms linking traumatic experience to emotion dysregulation. These mechanisms include changes in cognitive appraisal, trauma-related emotional conditioning and associative learning, and the development of maladaptive coping strategies. The review also considered how persistent emotion dysregulation may contribute to difficulties in interpersonal relationships, potentially diminishing social support network. Finally, interventions addressing emotion dysregulation were reviewed, including phase-based treatment, enhanced skills training in affective and interpersonal regulation, and trauma-focused cognitive behavioral therapy. Overall, the reviewed literature suggests that emotion dysregulation may represent an important mechanism linking prolonged interpersonal trauma with persistent CPTSD symptoms. However, CPTSD-specific evidence remains limited, and many findings are derived from PTSD or broader trauma-exposed populations. Further CPTSD-specific and longitudinal research is needed to clarify these mechanisms and to inform more individualized approaches to treatment.

Key words: Complex PTSD, Emotion regulation, Trauma, Cognitive beliefs

Chapter 1. Complex PTSD : An overview

1.1 Definition and diagnostic criteria

CPTSD, Complex Post-Traumatic Stress Disorder, is a stress related disorder that may develop following exposure to an event or series of events of extremely threatening or horrific nature. These events are often prolonged or repetitive and may involve situations from which escape is difficult or impossible (WHO, 2019). The most common symptoms of Complex PTSD include re-experiencing the traumatic event, avoidance, persistent sense of threat, affect dysregulation, and negative self-concept. Certain dissociative symptoms (Cloitre et al. 2013) and functional impairment, particularly in social and interpersonal functioning, (Brewin et al. 2017) might also occur. Although prolonged interpersonal trauma is strongly associated with CPTSD, it is not synonymous with the diagnosis, as CPTSD may also follow other forms of prolonged or repeated trauma.

According to ICD-11, the diagnostic criteria for Complex PTSD must first meet the diagnostic requirements of PTSD, which include symptoms of re-experiencing, avoidance and persistent sense of threat. In addition, three extra elements of Disturbances in Self-Organization (DSO) need to be present: 1) difficulties in affect dysregulation; 2) negative self-concept; 3) disturbances in relationships (WHO, 2019). The prevalence of CPTSD differs in different countries and cultures, with different measurement tools being an influencing factor. For example, one finding among British adults reported a prevalence of 12.9% (Karatzias et al. 2019) while another study among adults in the United States indicates

a prevalence of 3.8% (Cloitre et al. 2019). Individuals with CPTSD symptoms show a higher level of comorbidity with depressive and anxiety symptoms compared with individuals without CPTSD symptoms (Karatzias et al. 2019).

1.2 Complex PTSD versus PTSD

While both CPTSD and PTSD may develop following exposure to traumatic events, CPTSD is more strongly associated with long-term, chronic and repeated negative experiences such as prolonged domestic violence, childhood abuse and captivity (WHO, 2019). Although prolonged interpersonal trauma is particularly relevant to CPTSD, it should not be regarded as synonymous with the disorder, as CPTSD can follow different forms of prolonged or repeated trauma. What distinguishes CPTSD from PTSD is therefore not simply the type or duration of trauma exposure, but the broader pattern of persistent psychological difficulties that may follow the trauma.

Both disorders share the core PTSD symptom domains of re-experiencing, avoidance, and persistent threat. CPTSD, however, is characterized by additional DSO symptoms that reflect disturbances extending beyond trauma-related fear and threat responses. These include difficulties in affect regulation, a persistent negative self-concept, and disturbances in relationships (WHO, 2019). These additional difficulties may affect emotional functioning, self-perception, and interpersonal relationships, contributing to a broader pattern of psychological and functional impairment.

Even though additional symptoms have been observed in individuals with CPTSD, the category of Complex PTSD should not be seen as a more severe form of PTSD, rather, it describes a broader and qualitatively different pattern of psychological difficulties following trauma (Brewin, 2017).

1.3 Prolonged interpersonal trauma and emotion dysregulation

CPTSD is particularly associated with prolonged and repeated exposure to traumatic experiences, especially those occurring within interpersonal relationships. Such experiences may include childhood abuse and neglect, domestic violence, and repeated interpersonal victimisation. Unlike single-event trauma, prolonged interpersonal trauma often occurs over an extended period and may involve situations in which individuals have limited opportunities to escape or seek protection. These characteristics may contribute to broader and more persistent psychological difficulties beyond the core symptoms of PTSD, including disturbances in affect regulation, self-concept, and interpersonal functioning (Brewin et al., 2017; Cloitre et al., 2013).

Emotion regulation refers to the processes through which individuals influence the intensity, duration, and expression of their emotional responses in accordance with situational demands and personal goals (Gross, 1998). Emotion dysregulation, in contrast, refers to difficulties in effectively modulating emotional responses when they become inappropriate, excessive, prolonged, or insufficient for the given context (Gratz & Roemer, 2004). Emotion regulation may be particularly affected by prolonged interpersonal trauma.

Research on childhood maltreatment has consistently identified an association between maltreatment and difficulties in emotion regulation. A meta-analytic review of 35 studies found that childhood maltreatment was associated with greater emotion dysregulation and poorer emotion regulation, as well as greater reliance on strategies such as avoidance and emotional suppression (Gruhn & Compas, 2020). Interpersonal trauma has also been associated with affect dysregulation, which may involve difficulties tolerating and regulating negative emotional states (Dvir et al., 2014). In the context of CPTSD, affect dysregulation may manifest as either hyperactivation, such as heightened emotional reactivity, intense anger or fear, and difficulty calming down, or hypoactivation, such as emotional numbing, detachment, and reduced emotional responsiveness (Karatzias et al., 2018a). Individuals may also experience difficulties identifying, tolerating, and modulating their emotional states. These difficulties are consistent with the affect dysregulation component of disturbances in self-organization and highlight that emotion dysregulation in CPTSD may involve both excessive and insufficient emotional responses rather than a single pattern of emotional disturbance.

1.4 Neurobiological correlates

From a neurobiological perspective, prolonged and complex trauma may affect neural systems involved in threat processing and emotion regulation. Evidence reviewed by Marinova and Maercker (2015) suggests that Complex PTSD may be associated with alterations in brain regions involved in these processes, including the amygdala,

hippocampus, anterior cingulate cortex, and prefrontal regions. In particular, altered interactions between limbic regions involved in threat responses and prefrontal regions involved in emotion regulation may contribute to difficulties in regulating emotional responses following trauma. However, neurobiological evidence specific to CPTSD remains limited, and further research is needed to clarify its distinct neural correlates (Marinova & Maercker, 2015).

Chapter 2. Literature review

2.1 Emotion dysregulation as a mechanism linking prolonged interpersonal trauma and Complex PTSD

Prolonged interpersonal trauma may contribute to the development and maintenance of CPTSD through persistent alterations in emotion regulation. Traumatic experiences may affect several processes involved in emotion regulation, including cognitive appraisal, emotional conditioning and associative learning, and the development of maladaptive coping strategies. What's more, trauma-related changes in behaviour and interpersonal functioning may also impair social relationships, increasing the possibility of loneliness and worsening social support network. The following sections examine these proposed pathways and the evidence supporting them.

2.1.1 Trauma-induced cognitive appraisal changes

Trauma could lead to individuals developing highly threatening appraisals beyond the original events. These maladaptive appraisals may concern either the environment (or the event) or the self. Overgeneralization of danger is one manifestation of maladaptive appraisal of the environment (e.g., "bad things always happen to me"). With regard to the self, trauma could lead to negative self-evaluations where survivors judge their own behaviors during the trauma in a negative way, such as believing that the self is incapable or that they could have responded more effectively (Gómez de la Cuesta et al., 2019).

The negative misinterpretation of survivors' manifested symptoms is another possible influence of trauma on cognitive appraisals. Individuals might catastrophize their post-traumatic symptoms or have the belief that the trauma has caused a "permanent and disturbing change" to their identity and future (Gómez de la Cuesta et al., 2019). Studies also found that, long-term exposure under highly stressful circumstances is saliently associated with decreases in Problem-Solving Confidence and Personal Control, as well as increase in the use of Avoidance Strategies. These findings show that stress and trauma could undermine individuals' "Secondary appraisal" (in Lazarus's theory), in another words, the appraisal of whether they possess sufficient resource and capability to cope with the stressful situation (Padmanabhanunni & Pretorius, 2023).

Trauma's shaping effect on cognitive appraisal might also differ based on individual's developmental stage. For children and adolescents who may lack the knowledge and life experience to understand the world, they might have more difficulties accurately interpreting the causes and consequences of a traumatic event. As a result, they may be more vulnerable to developing distorted cognitive appraisals (Gómez de la Cuesta et al., 2019).

2.1.2 Trauma related Emotional Conditioning and Associative Learning

In Pavlovian associative learning, fear conditioning is a core form where an individual pairs a neutral conditioned stimulus with an aversive unconditioned stimulus until the neutral cue alone triggers a conditioned fear response. In the context of Complex PTSD, the trauma's traits of being long-term and sometimes unescapable could facilitate the pairing processes

making threat association stronger. For example, if a child constantly experiences caregiver's vocal abuse with a raised voice, after a certain period of time, the raised voice itself could possibly induce fear or anxiety even though the content is neutral.

The maintenance of traumatic association does not apply to everyone. A part of individuals who experience a trauma will have an acute stress response immediately but will have their symptoms decrease in less than a month. This is facilitated with a process called Extinction Learning, which is the learning about that the neutral cues no longer represent danger (Colvonen et al., 2019). Another closely related concept is called safety learning. Safety learning is the process that an individual learns to distinguish safe cues from unsafe ones. A safe cue can help inhibit fear response and make individuals feel calmer. Safety learning is associated with extinction learning through an inability to inhibit fear responses in the presence of safety cues, thus never allowing extinction learning to occur (Colvonen et al., 2019). However, the study of extinction learning and safety learning are more conducted in the context of acute trauma, further research is needed to understand their role in situations of prolonged trauma.

2.1.3 Trauma-induced maladaptive emotional coping strategies

Traumatic events can induce cognitive maladaptive coping strategies or behavioral maladaptive coping strategies. Childhood trauma is a key developmental catalyst that drives individuals to develop maladaptive cognitive emotion regulation strategies (Zhang et al., 2024). In maltreating developmental environments (abusive or neglectful homes), children

observe and learn maladaptive emotional responses and regulation styles from their caregivers due to a lack of supportive, healthy interactions (Zhang et al., 2024). For example, adolescents suffering from emotional abuse and neglect often have their emotional expressions ignored or punished by caregivers, leading them to adopt maladaptive coping strategies such as suppression, rumination and avoidance. To eliminate their short-term harm and cope with the intense negative emotions of abuse, these adolescents begin to engage in repetitive rumination about the traumatic events (Zhang et al., 2024).

Intense negative affect and sensory experiences directly "prompt" individuals to engage in trauma-related rumination as a way to cope with these intrusive distressing sensory memories. Mechanistically, this repetitive thinking acts as a cognitive avoidance strategy; because directly facing the concrete, anxiety-eliciting visual and emotional details of the trauma is highly painful, individuals instinctively escape into abstract, repetitive cognitive processing (rumination) about the causes and consequences of the event to avoid the raw emotional impact of intrusive memories (Spinhoven et al., 2015). Specifically, the ruminative coping preference makes traumatic memory to be highly integrated into the individual's autobiographical memory and personal identity (Event Centrality). This cognitive coping mechanism directly impedes the normal elaboration, contextualization, and cognitive restructuring of the trauma memory, thereby serving as a critical linking mechanism that prospectively predicts and mediates the onset and chronic maintenance of PTSD/CPTSD symptoms (Spinhoven et al., 2015). On the aspect of behavioral maladaptive coping strategy, studies found that individuals who experienced severe childhood trauma tend to have more

alcohol reliance and drug abuse as a way to relieve pain when facing with adulthood distress (Curran et al., 2021).

2.1.4 Interpersonal difficulties and a Worsening cycle

Maladaptive emotional regulatory responses can undermine interpersonal relationships by increasing the possibility of isolation and emotional instability, which in turn can further fuel emotion dysregulation (Jannini et al., 2025). For example, the inability to control anger during conversations or the avoidant coping can damage close relationships, this in turn diminishes the individual's social support network, a crucial protective factor in managing trauma-related disorders (Jannini et al., 2025).

2.2 Recent empirical evidence on emotion dysregulation in Complex PTSD

2.2.1 Evidence for cognitive appraisal changes

Karatzias et al. (2018b) conducted a study among 171 trauma-exposed patients in a British clinical sample. They used the ICD-11 framework and compared patients diagnosed with PTSD and CPTSD. One of the questions they aimed to address was whether negative trauma-related cognitions can predict or distinguish CPTSD from PTSD. They measured individuals' negative trauma-related cognitions by using the Posttraumatic Cognitions Inventory (PTCI), which includes three major dimensions: negative cognitions about the self, negative cognitions about the world and self-blame (Karatzias et al., 2018b). The results showed that negative trauma-related cognitions about the self were the strongest factor predicting CPTSD and distinguishing CPTSD from PTSD, followed by attachment anxiety and expressive

suppression (Karatzias et al., 2018b). This finding suggests that negative self-related appraisals following trauma may be particularly relevant to the development or maintenance of Complex PTSD symptoms.

2.2.2 Evidence for maladaptive emotional coping strategies

Comparing patients with CPTSD and PTSD, Karatzias et al. (2018b) also found that in terms of emotion regulation strategies used, individuals with CPTSD scored significantly higher on expressive suppression. They also reported lower use of cognitive reappraisal than individuals with PTSD. Overall, the findings showed that traumatized individuals overutilize relatively ineffective emotion regulation strategies such as expressive suppression, and underutilize relatively effective emotion regulation strategies such as cognitive reappraisal (Karatzias et al., 2018b).

Another study conducted by Fernández-Fillol et al. (2026) examined the network relationship between PTSD/DSO symptoms and emotion regulation strategies among 317 Spanish females who had experienced intimate partner violence. The result showed that DSO symptoms were positively associated with expressive suppression, indicating that more prominent DSO symptoms were associated with greater use of expressive suppression. DSO symptoms were also negatively related with cognitive reappraisal, suggesting that more prominent DSO symptoms were associated with less use of this strategy (Fernández-Fillol et al., 2026). These findings suggest that greater reliance on expressive suppression and less use of cognitive reappraisal may be associated with CPTSD-related difficulties.

Taken together, these findings suggest that maladaptive emotion regulation strategies may represent one pathway through which prolonged interpersonal trauma is associated with CPTSD-related difficulties, although the available evidence remains primarily correlational.

2.2.3 Evidence for interpersonal difficulties and a self-maintaining cycle

According to the network analysis conducted by Fernández-Fillol et al. (2026), the most central symptom they found in the whole CPTSD symptom network was "feeling distant or cut off from others" (Fernández-Fillol et al., 2026). This suggests that interpersonal disconnection may play an important role in the broader network of CPTSD symptoms. One systematic review and meta-analysis included 20 CPTSD-related studies, with a total of 9657 CPTSD participants, to examine the interpersonal outcomes associated with CPTSD. The authors found a medium-to-large association between CPTSD and interpersonal problems, with social dysfunction among the DSO symptoms showing the strongest association with interpersonal problems (Yu et al., 2026). These findings indicate that interpersonal difficulties are indeed a significant feature of CPTSD and suggest that social disconnection may contribute to a worsening or self-maintaining cycle in the persistence of CPTSD symptoms.

2.2.4 Indirect evidence on trauma-related emotional conditioning

Direct evidence linking trauma-related emotional conditioning specifically to CPTSD remains limited, however, evidence from PTSD research provides indirect support for this

proposed mechanism. Colvonen et al. (2019) reviewed the relationship between emotional learning and PTSD and identified three major processes involved in this mechanism: fear conditioning, extinction learning and safety learning. The authors concluded that maladaptive fear conditioning, impaired extinction learning/recall and impaired safety learning are important mechanisms involved in the development and maintenance of PTSD (Colvonen et al., 2019).

Therefore, traumatic experiences may strengthen associations between neutral cues and threat, while difficulties in extinction and safety learning may allow these conditioned emotional responses to persist. However, whether similar conditioning processes operate in the context of prolonged interpersonal trauma and contribute specifically to CPTSD remains insufficiently established.

2.3 Cultural considerations

Different cultural norms have certain social display rules on emotional expression. Some studies found that East Asian individuals generally prefer to use suppression, whereas Western individuals tend to have more emotional expression in certain contexts (Song et al., 2024). Considering these differences, if a certain culture encourages emotional restraint, less emotional expression does not necessarily mean hypoactivation or emotional numbness. Conversely, being emotionally expressive does not directly indicate emotion dysregulation. When diagnosing the manifested symptoms, it is important to consider different cultural backgrounds as baselines to interpret emotion expressions as whether hyperactive or

hypoactive. And when interviewing people from different cultural background, even though the nature of the internal disorganized state (for example, distress, negative self-concept) might be similar, the external manifestation could be diverse.

Cultural background also influences people's use of emotion regulation strategies. One systematic review included 54 studies comprising 116 sample groups of adults across East Asian and Western cultural contexts, including samples from China, Japan, the United States, and European countries found that certain emotion regulation strategies that are perceived as maladaptive (such as suppression and rumination) in the Western literature had weaker associations with poorer mental health outcomes in East Asian samples (Qiu et al., 2026). Therefore, a coping strategy should not be classified as maladaptive solely based on its frequency or form without considering its cultural context and function. This suggests that both emotion dysregulation manifestations and the strategies used to regulate emotions in CPTSD should be interpreted with consideration of cultural norms and meanings rather than assumed to have equivalent manifestations across cultural contexts.

Chapter 3. Evidence-based interventions

3.1 Phase-based treatment

Phase-based treatment was initially introduced by Judith Herman (1992). According to her trauma recovery/ phase-oriented model, complex trauma involves disempowerment and disconnection, rather than only fear responses to a discrete traumatic event. Recovery therefore requires rebuilding safety and functioning before directly processing traumatic memories. Her key assumption was that some patients—particularly those with severe emotion dysregulation, dissociation, interpersonal difficulties, or ongoing instability—may not initially have sufficient affect regulation and stress tolerance to engage effectively with traumatic memories (Herman, 1992). Her original model proposed three stages of recovery: safety, remembrance and mourning, and reconnection.

Cloitre et al. (2012) subsequently adapted the phase-based approach specifically for CPTSD in the ISTSS guidelines. The treatment consists of 3 phases: (1) stabilization, which aims to regulate emotions and establish a sense of safety; (2) trauma processing, which focuses on reprocessing traumatic memories ; and (3) reintegration, which aims to rebuild self-identity and restore social functioning. The phase-based approach is particularly relevant to emotion dysregulation because stabilization is prioritized before trauma processing. Phase 1 typically focuses on developing skills for emotion regulation, stress management, grounding, and interpersonal functioning, with the aim of increasing individuals' capacity to tolerate and manage distress before engaging with traumatic memories (Cloitre et al., 2012).

Evidence suggests that phase-based interventions may be beneficial for emotion dysregulation in Complex PTSD. A recent systematic review and meta-analysis found greater improvements in DSO-related affect regulation among participants receiving phase-based interventions, although the available evidence remains limited and heterogeneous (Lee et al., 2026). Although empirical evidence reports that phase-based interventions can generally reduce relevant symptoms, the necessity of a fixed sequence remains debated. A systematic review of 12 studies found that compared to single use of phase 2 treatment, the treatment of phase1 + phase 2 did not provide additional benefits and the effects of phase 1 on subsequent trauma processing outcomes were also mixed (Darby et al., 2023). These findings have led researchers to explore more flexible, non-phase-based and modular approaches to treatment.

3.2 Enhanced Skills Training in Affective and Interpersonal Regulation

Enhanced Skills Training in Affective and Interpersonal Regulation (ESTAIR) is a flexible, multi-modular, and person-centered therapy designed to treat the full range of ICD-11 Complex PTSD symptoms. It was developed from the original STAIR-NT (Narrative Therapy) to better fit the needs for treatment of different Complex PTSD symptoms (Karatzias et al., 2023).

3.2.1 STAIR-NT

STAIR-NT is a two-module treatment developed prior to the introduction of Complex PTSD, focusing on emotion regulation and relational capacities among individuals with histories of

childhood abuse. It was developed based on the recognition that these individuals may present with difficulties beyond core PTSD symptoms, particularly in affect regulation and interpersonal functioning (Karatzias et al., 2023). The theoretical framework of STAIR is based on skills training in affective and interpersonal regulation, with the assumption that improving emotion regulation and interpersonal skills can enhance overall functioning and prepare individuals for subsequent trauma processing. The STAIR module aims to improve patients' everyday functioning by providing skills for experiencing, managing, and modulating emotions, as well as skills for interpersonal communication and developing more comfortable and trusting relationships. It is typically delivered over eight sessions, followed by eight sessions of Narrative Therapy (NT). NT is an adapted form of exposure-based trauma processing, in which individuals recall and process traumatic memories while reducing fear responses and reappraising the meanings associated with their traumatic experiences (Cloitre et al., 2020).

Evidence from clinical studies has provided support for the effectiveness of STAIR-NT in reducing PTSD symptoms and improving emotion regulation and interpersonal functioning. The treatment has been examined in several countries, including the United States and European countries, with findings suggesting its potential applicability across different cultural contexts (Cloitre et al., 2020).

3.2.2 ESTAIR

Following the introduction of CPTSD and recognition that sustained adult-onset trauma can produce similar symptom profiles, STAIR-NT was subsequently adapted into ESTAIR by Karatzias, McGlanaghy, and Cloitre (2023). Compared with STAIR, ESTAIR does not require a fixed sequence; it uses a more flexible order and follows the principle of personalized care. ESTAIR comprises four modules: Emotion Regulation, Relationship Patterns, Self-Concept, and Narrative Therapy. Each module is structurally equivalent and has 6 sessions. The Emotion Regulation module focuses on identifying and managing different emotions. The Relationship Pattern Module focuses on exploration and revision of maladaptive interpersonal schemas, flexibility in interpersonal expectation and behaviors displayed in social interactions. The Self-Concept module focuses on the impact of trauma on one's self concept and on how to tackle negative thoughts and assumptions towards oneself as well as build a balanced view of the Self. The Narrative Therapy module includes identifying traumatic memories and reappraisal of the meanings of the event(s) by comparing old trauma-generated beliefs with newly evaluated ones (Karatzias et al., 2023).

ESTAIR may be particularly relevant to emotion dysregulation and interpersonal difficulties because it directly targets these dimensions through its Emotion Regulation and Relationship Patterns modules (Karatzias et al., 2023). Empirical evidence also provides preliminary support for its effectiveness. In a pilot randomized controlled trial of 56 adults with CPTSD, ESTAIR resulted in significantly greater reductions in both PTSD and DSO symptoms compared with treatment as usual, with large pre-to-post effect sizes for DSO symptoms (Karatzias et al., 2024).

3.3 Trauma-Focused Cognitive Behavioral Therapy

Cognitive Behavioral Therapy holds the view that cognition, emotion and behavior are interconnected; thus, modifying maladaptive cognition and behaviors could reduce emotional distress (Cohen et al., 2018). Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) applies these principles to trauma-related difficulties by helping individuals identify and modify maladaptive trauma-related thoughts and beliefs, while gradually processing traumatic experiences and developing more adaptive coping and emotion regulation skills (Cohen et al., 2018).

The TF-CBT model is a brief (8-25 sessions), cognitive-behavioral, resiliency-building, components- and phase-based model for trauma-impacted children or adolescents and their parents and caregivers (Cohen et al., 2018). It includes 3 phases of equal length. Phase 1 provides Stabilization Skills including the following components: Psychoeducation, Parenting skills, Relaxation skills, Affective skills to address trauma-related emotion dysregulation, and Cognitive processing skills to generate more accurate and helpful thoughts. Phase 2 contains only 1 component: Trauma narration and processing, to describe and cognitively process individual's personal trauma experience. Phase 3 is about Consolidation and includes the following components: In vivo mastery to address overgeneralized fear and avoidance of innocuous trauma reminders, Conjoint child-parent sessions and Enhancing safety and future development. For each session, the therapist meets for about half of the session with the child and about half of the session with the parent or caregiver (Cohen et al., 2018).

Studies conducted in different geographical regions including the USA, Europe, Australia, and Africa have contributed to the generalizability and efficacy of the treatment. Results demonstrated that TF-CBT has a superior effect compared to wait-list controls, supportive/non-directive interventions, and other alternative psychological treatments in improving symptoms such as depressive feelings, anxiety, maladaptive behaviors and/or cognitions (Cohen et al., 2018).

TF-CBT is also relevant to emotion regulation because it directly addresses trauma-related emotion dysregulation through affective and relaxation skills. These components help individuals identify, tolerate, and manage intense emotional states, while cognitive processing skills aim to modify maladaptive interpretations that may contribute to emotional distress. Thus, TF-CBT addresses emotion dysregulation through both emotional and cognitive pathways, while trauma processing allows individuals to gradually integrate their traumatic experiences (Cohen et al., 2018).

Conclusion

This thesis aimed to explore emotion regulation in individuals with Complex PTSD. In particular, recent literature published between 2012 and 2026 was reviewed to shed light on potential mechanisms underlying the development and maintenance of CPTSD symptoms, with a particular focus on the roles of emotion regulation difficulties. Overall, this literature review showed that emotion regulation difficulties function as important mechanisms linking prolonged interpersonal trauma with individual's persistent psychological difficulties in Complex PTSD.

Specifically, this review examined several pathways in emotion regulation where maladaptive processing might occur. First, long-term traumatic exposure might alter cognitive appraisals of the self, others, and the surrounding environment, contributing to negative self-image, shame or lack of security. Second, repeated traumatic exposure may shape emotional conditioning and associative learning, resulting in hyperactive or hypoactive emotion responses to certain stimuli. Third, trauma may contribute to the development and maintenance of maladaptive coping and emotion regulation strategies, such as avoidance, suppression, and rumination. The accustomed preference of using these strategies can add difficulties for emotion regulation. Fourth, dysregulated emotion may, in turn contribute to behavioral and interpersonal dysfunctioning, leading to greater social isolation and reduced access to social support, which may further increase individual's emotional vulnerability. Besides these pathways, other aspects, such as emotion-related neurobiological changes, may also contribute to the link between prolonged trauma and affect dysregulation symptoms.

Additionally, different cultural norms about emotion expression should be considered while interviewing individuals from different backgrounds.

Several interventions targeting Complex PTSD were reviewed, with particular attention to their relevance to emotion regulation difficulties. Phase-based treatment highlights the potential value of addressing emotional stabilization before trauma processing, although evidence suggests that a fixed sequence may not be necessary for all patients. ESTAIR adopts a more flexible, person-centered approach and has shown preliminary benefits in emotion regulation and interpersonal functioning. TF-CBT, meanwhile, addresses trauma-related maladaptive cognitions and behaviors while incorporating skills for emotional regulation.

There are several limitations that should be considered when interpreting the findings of this review. First, evidence for the mechanism of emotional conditioning and associative learning remains indirect, evidence from PTSD research was used as possible support for this proposed pathway. Second, considering the relatively recent recognition of CPTSD as a distinct diagnosis in ICD-11, literature specifically examining emotion regulation in CPTSD remains limited. Third, much of the evidence reviewed is indirect or based on cross-sectional designs, thus, relationships between trauma, emotion regulation difficulties and CPTSD symptoms are more correlational than causal. Finally, most of the samples included in the reviewed literature was from Western populations, while research examining CPTSD across different cultures and regions remains limited. Therefore, generalizability of the proposed mechanisms across different cultural settings remains uncertain.

For future research examining emotion regulation in Complex PTSD, more studies conducted specifically in CPTSD populations are needed. Studies involving individuals with PTSD or trauma exposure may provide useful insights, but their findings remain indirect and may not fully capture the mechanisms specific to CPTSD. Moreover, more cross-cultural studies are needed to better understand the mechanisms of emotion regulation in Complex PTSD across different cultural contexts. Finally, future research could investigate the interactive relationships among cognitive appraisals, emotional conditioning, maladaptive coping strategies, and interpersonal difficulties in contributing to CPTSD symptoms, rather than examining these factors as separated processes.

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