Information Handout

Professional Version | US English

Cognitive Behavioral Model of Post Traumatic Stress Disorder (PTSD: Ehlers & Clark, 2000)

Description

Post-traumatic stress disorder (PTSD) is a common reaction to traumatic events where a person was exposed to actual or threatened death, serious injury, or sexual violence. Depending upon the type of trauma experienced, approximately 10% to 30% of trauma survivors will develop PTSD (Santiago et al., 2013). Some of the strongest predictors of whether an individual will develop PTSD is how severe they perceived the trauma to be, and the levels of social support post-trauma (Brewin, Andrews & Valentine, 2000).

Symptoms of PTSD include:

- **Intrusion symptoms.** These are characterized by: recurrent, involuntary and intrusive distressing memories of the traumatic events; recurrent distressing dreams where the content or affect of the dream is related to the traumatic event; dissociative reactions where it feels as though the traumatic events are recurring in the present moment (flashbacks); and intense or prolonged physiological distress at exposure to reminders of the trauma.
- **Avoidance symptoms.** These include avoidance or efforts to avoid: distressing memories, thoughts, or feelings about the traumatic events; or avoiding external reminders that trigger them (e.g. people, places, conversations, activities, objects, or situations).
- **Negative alterations in cognitions and mood associated with the traumatic events.** These include: being unable to remember an important aspect of the traumatic events; persistent and exaggerated negative beliefs or expectations about oneself, others, or the world; persistent, distorted consequences about the cause or consequences of the traumatic events that lead the individual to blame themselves or others; persistent strong negative emotions (e.g. fear, anger, guilt, shame); diminished interest or participation in significant activities; feeling detached from others; and feeling unable to experience positive emotions.
- **Marked alterations in arousal and reactivity.** These should begin or worsen after the traumatic event, and may include: irritable behavior and angry outbursts, reckless or self-destructive behavior, hypervigilance, exaggerated startle response, problems with concentration, and problems falling or staying asleep.

A defining characteristic of PTSD is feeling a current sense of imminent threat or danger. Anke Ehlers & David Clark's model of PTSD, published in 2000, provides a comprehensive cognitive behavioral formulation of PTSD. They describe PTSD as a 'puzzle': anxiety is thought to be the result of believing that there is an impending threat, so why does anxiety persist in PTSD if the worst has already happened? Their model makes a number of important proposals which explain why a sense of current threat is maintained in people suffering from PTSD. The domains which their model covers include:

- **Memory.** Memories of the traumatic event may have particular properties, such as involuntary recall, fragmentation, high levels of vividness, sensory and emotional re-experiencing, and the memories being experienced as if they were happening right now (nowness). These properties create a sense of current threat.
- **Appraisals.** A person's appraisals (the meaning they make) also have the effect of creating a sense of serious current threat. Appraisals may be of the trauma, or consequences of the trauma. Perceived threats might concern the world (e.g "the world is dangerous") or the self (e.g. "I'm responsible", "I'm broken").
- **Behaviors.** Feeling a sense of serious current threat leads naturally to the deployment of coping behaviors. These responses can be cognitive or behavioral, and notably include avoidance. Such strategies are well-intended, but can prevent cognitive change (i.e. prevent change in threat appraisals), and change to the trauma memory, and thus prevent recovery.

Description

A detailed account of the cognitive behavioral model of PTSD can be found in Ehlers & Clark (2000). This information handout displays their cognitive model of PTSD. A summary of important components is given here:

- **Characteristics of trauma / sequelae / prior experiences / beliefs / coping state of the individual.** The model makes room for elaboration of background factors that influence whether an individual is vulnerable to developing PTSD. Clinicians often find it helpful to weave these factors into a formulation to help their clients to understand why their experiences led to their developing PTSD. There is not enough space in the current document to describe all of these, but as an illustration, characteristics of the trauma such as duration, predictability, and intentionality (how deliberate it was) can strongly influence whether someone will go on to develop PTSD. Similarly, prior experience of trauma can influence what coping styles might be employed (e.g. dissociation, appeasement) and whether a particular event might be appraised as confirming or shattering prior beliefs about the self or the world (e.g. "I knew it, this always happens to me" or "how could this happen?").
- **Cognitive processing during trauma.** There is considerable evidence that an individual's cognitive processing during a traumatic event strongly influences their later recovery or development of post-traumatic symptoms. One example is the experience of 'mental defeat', characterized by the "perceived loss of all physiological autonomy, accompanied by the sense of not being human any longer" which predicts the development of PTSD and poorer treatment outcomes (e.g. Ehlers et al, 1998). One notable publication which has explored cognitive processing during trauma is Schauer & Elbert's (2015) Dissociation following traumatic stress. Schauer and Elbert outline cognitive and physiological changes which an individual might experience during trauma, which are adaptive for surviving life-threatening events, and which have a clinical bearing upon the later development of PTSD and dissociative symptoms.
- **Nature of trauma memory.** Ehlers and Clark outline unique qualities of trauma memories, many of which have been elaborated further by subsequent research (e.g. Brewin, 2014). They describe how "re-experiencing in PSTD consists of sensory impressions rather than thoughts" which more contemporary accounts might argue involves activity in an involuntary perceptual memory system that is distinct from ordinary episodic memory (e.g. Brewin, 2014). Qualities of trauma memories often described by individuals with PTSD include the vivid and sensory nature of the memories which might be experienced in any of the senses (sight, sound, smell, touch, taste); the here-and-now nature of the trauma memories whereby they feel as though they are being re-experienced in the present moment rather than re-membered as events from the past; and the involuntary nature of the recall whereby trauma memories are often triggered by other events, thoughts, or feelings rather than voluntarily recalled.

Description

- **Negative appraisal of trauma and / or its sequelae.** Ehlers & Clark describe how individuals who recover from PTSD "see their trauma as a time-limited event that does not have global negative implications for their future." In contrast, they propose that individuals who develop PTSD have developed negative appraisals of the trauma and its consequences that have the "common effect of creating a sense of serious current threat". Negative appraisals might be external (e.g. the world is dangerous) or internal (e.g. I am blameworthy). They can take many forms and working with them is a significant pillar of the cognitive approach to treating PTSD.
  - Appraisals of the traumatic event itself can produce a sense of current threat by: exaggerating the probability of further catastrophic events (e.g. "Bad things always happen to me"); negative judgments about the way one behaved during the trauma (e.g. a patient who didn't help another victim of an accident to escape might view this lack of action as a stain on their character).
  - Appraisals of one's PTSD symptoms can be overly negative, resulting in a sense of threat. For example, appraising flashbacks as a sign of madness or permanent change instead of viewing them as a normal consequence of abnormal events (e.g. "I must be going mad").
  - Appraisals of the way that other people react to them following the trauma can have a profound effect of how a survivor of trauma thinks and behaves (e.g. "They must think it was my fault).
- **Current threat.** As conceptualized by Ehlers & Clark, the experience of current threat can be reached via multiple means (via intrusive memories, via appraisals). The sense of current threat might be described in terms of: intrusive symptoms that are directly threatening; emotional symptoms which might include fear, shame, guilt, disgust, anger; physiological symptoms that might be related to the individual's current emotional state, or to their physiological state at the time of the trauma.
- **Strategies intended to control threat symptoms.** Ehlers and Clark describe how people with PTSD respond strategically to manage their experience of serious threat. They argue that "the strategy selected is meaningfully linked with the individual's appraisals of the trauma and/or its sequelae and their general beliefs about how best to deal with the trauma". For example, if flashbacks were appraised as a sign of going mad, an individual with PTSD might try to suppress their thoughts and avoid reminders of the trauma. Similarly, if a victim of assault forms a belief that they are likely to be attacked again, they may engage in safety behaviors such as being extra-vigilant for signs of danger. Ehlers and Clark propose that strategies intended to control the threat are counterproductive because they can result in directly producing PTSD symptoms, preventing change in negative appraisals of the trauma, or preventing change in the nature of the trauma memory.

Description

Trauma-focused cognitive therapy for PTSD (CT-PTSD) is an empirically supported treatment for PTSD derived from the Ehlers and Clark model, and is recommended as a first-line treatment in international clinical guidelines (APA, 2017; ISTSS, 2019; NICE, 2018). Wild et al. (2020) describe how CT-PTSD has three aims:

1. To elaborate and update the trauma memory in order to reduce re-experiencing symptoms.
2. To modify negative appraisals.
3. To change strategies that maintain the patient's sense of threat and simultaneously help them to reclaim activities in their life that promote a sense of worth and meaning.

Interventions which form part of CT-PTSD include:

- Helping clients to develop specific and measurable goals for therapy.
- Developing an idiosyncratic version of the formulation, and helping clients to understand how their PTSD is maintained by the components of the model.
- Encouraging clients to reclaim / rebuild their life.
- Exposing clients to — and updating — the trauma memory.
- Changing problematic appraisals of the traumas and their sequelae.
- Training clients to discriminate triggers of re-experiencing (stimulus discrimination).
- Site visits.
- Reducing unhelpful avoidance and safety behavior.
- Summarizing what has been learned during therapy, and preventing relapses, using a therapy blueprint.

Instructions

Suggested Question

It would be helpful to explore and understand how your PTSD has developed and what is keeping it going. I wonder if we could explore some of your history, thoughts, feelings, and reactions to see what kind of pattern they follow?

1. **Characteristics of trauma / sequelae / prior experiences / beliefs / coping state of the individual.** All of these factors can affect an individual's trauma memories, and how they appraise what happened to them. When formulating with clients, it is helpful to ask the client to label what happened to them, but it is equally important not to probe for too much detail about the trauma too early, as it may lead to unnecessary distress or dissociation, or getting side-tracked. The client can be reminded that there will be an opportunity to talk in detail about the trauma during subsequent stages of trauma treatment.
   - **Assess the trauma:** Can you tell me what happened in a few words, or give me the headlines of what happened?
   - **Assess sequelae:** What are some of the most significant things that have happened as a result of the trauma (e.g. other losses, how other people have reacted)?
   - **Assess prior experiences:** Have you ever experienced other traumas before in your life? Could we make a list of what you have been through prior to this?
   - **Assess prior beliefs:** Before this trauma happened, how did you feel about the world? (e.g. fair, unfair, just, unjust). How did you feel about yourself? How did you feel about other people? How did those beliefs change as a result of the trauma (this question addresses trauma appraisals)?
2. **Cognitive processing during trauma.** The way that people process events during a trauma can have significant effects later. For example: clients who dissociate during a trauma are more likely to experience dissociation later; clients who experience 'mental defeat' may struggle more with later treatment.
   - Do you remember what happened to your state of mind during the event? Can you describe what it felt like?
   - Were there any times during the trauma where you felt separate from what was happening? Perhaps like you were an observer? Or where you knew something was happening but weren't able to feel it?
   - Sometimes during frightening events our bodies and minds can respond automatically, we might: freeze (feel frozen to the spot, unable to move), appease (beg, plead, bargain), try to escape (take flight), try to fight (become aggressive, become violent), flag (become tired, hopeless, or helpless), or faint (lose consciousness).
   - Were there any times during the trauma where you felt hopeless or defeated?
3. **Nature of trauma memory.** Memories in PTSD have particular properties which influence how they are re-experienced. Trauma memories are often especially vivid, and might be re-experienced in any of the senses (sight, sound, touch, smell, taste, pain). They are often re-experienced involuntarily as flashbacks, nightmares, or unwanted memories, or as though the events are happening in the present moment ('nowness'). It is often a helpful part of PTSD psychoeducation to explore these properties as it can provide a helpful rationale for undertaking trauma memory processing.

- What properties do your trauma memories have that your other memories don't (consider: fragmentation, vividness & sensory qualities, re-experiencing in the here-and-now)?
- Do your trauma memories ever just pop into your mind when you don't want them to?
- When you have an unwanted memory of your trauma, do you just see it? Do you ever hear it, smell it, or feel it? Do you feel physical feelings in your body?
- What do you think of yourself for having memories like these (this question targets appraisals of trauma memories)?

4. **Matching triggers.** People with PTSD often find that their memories for the trauma are experienced involuntarily. Triggers are often matching stimuli that were present at the time of the trauma. Clinically, it can prove helpful to understand more about triggers because they can be used as opportunities for stimulus discrimination, or as targets for memory processing.
   - What reminders of your trauma do you avoid?
   - Can you describe any sights, sounds, smells, tastes, types of touch, people or places that can trigger unwanted memories of your trauma?
5. **Negative appraisals of trauma and/or its sequelae.** According to the Ehlers & Clark's model, an individual's appraisals of the trauma, and of the consequences of their trauma, maintain a current sense of threat. Understanding how a client makes sense of their trauma and helping them to test some of their appraisals are the core tasks of cognitive therapy for PTSD.

Appraisals can concern:

- **The trauma:** e.g. I'm going to die.
- **Consequences of the trauma:** I'm going mad, other people think I'm disgusting.
- **External factors:** e.g. the world is unsafe.
- **Internal factors:** e.g. I am to blame, I am disgusting.

Appraisals can be formed at different times, and might require different techniques to address them effectively during therapy:

- **Peri-traumatic appraisals are made the time of the trauma:** e.g. I'm going to die, he's going to hurt me.
- **Post-traumatic appraisals are formed after the trauma:** e.g. I'm going mad, I'll never get better, people would think I'm disgusting if they knew.

A tentative understanding of a client's appraisals can be gathered during assessment or formulation stages, but will often be refined during the course of therapy. Helpful questions might include:

- What was going through your mind when <trauma> happened?
- What did you think was going to happen?
- What do you think now about yourself, your symptoms, your actions, or what other people think of you?

6. **Current threat.** Ehlers and Clark propose that the experience at the core of PTSD is a sense of serious current threat: a sense of danger in the present or near-future. A significant minority of clients with PTSD report non-fear emotional reactions during and after their trauma, including feelings of shame, guilt, and anger. As a result, some clients' sense of current threat might be primarily related to a belief that they would be judged negatively if people knew what happened to them (shame), rather than a belief that they are currently in physical danger (fear).
   - What are the problems that have brought you to therapy?
   - When you get triggered, what do you experience?
   - What symptoms, emotions, or body sensations do you experience now?
   - What do you feel when you think that about yourself?
   - Do you ever feel feelings like shame or disgust?

7. **Strategies intended to control threat / symptoms.** Given the sense of threat experienced by people with PTSD, it is natural that they take steps to manage or neutralize the perceived danger. These strategies can be cognitive (e.g. thought suppression) or behavioral (e.g. avoidance, use of substances). Ehlers & Clark propose that safety strategies in PTSD are problematic for three reasons. Firstly, they can directly produce PTSD symptoms (e.g. thought suppression can lead to more frequent experiences of what is being suppressed). Secondly, they can prevent unhelpful appraisals of the trauma and its consequences from changing (e.g. not talking about what happened gives you fewer opportunities to receive corrective feedback). Thirdly, they can prevent the trauma memory from changing (e.g. avoiding one's trauma memories can prevent processing from occurring).
   - How do you cope with unwanted memories of what happened? (e.g. keep busy, use substances, push them away)
   - How do you cope with thinking that <post-traumatic appraisals> about yourself?
   - How do you cope with believing that other people think that about you?
   - What do you avoid? (e.g. people, places, thoughts, memories)
   - What do you do to cope?
   - When you feel disgusting / ashamed / guilty what do you do?
   - How do your coping strategies make you feel (explore short term and long term effects)?

References

American Psychological Association. (2017). Clinical practice guideline for the treatment of posttraumatic stress disorder (PTSD) in adults. Retrieved from http://www. apa.org/ptsd-guideline/ptsd.pdf

Brewin, C. R. (2014). Episodic memory, perceptual memory, and their interaction: foundations for a theory of posttraumatic stress disorder. *Psychological Bulletin*, 140(1), 69.

Brewin, C. R. (2015). Re-experiencing traumatic events in PTSD: New avenues in research on intrusive memories and flashbacks. *European journal of Psychotraumatology*, 6(1), 27180.

Ehlers, A., & Clark, D. M. (2000). A cognitive model of posttraumatic stress disorder. *Behaviour research and therapy*, 38(4), 319-345.

Ehlers, A., Clark, D. M., Dunmore, E., Jaycox, L., Meadows, E., & Foa, E. B. (1998). Predicting response to exposure treatment in PTSD: The role of mental defeat and alienation. *Journal of Traumatic Stress: Official Publication of The International Society for Traumatic Stress Studies*, 11(3), 457-471.

Kilpatrick, D. G., Resnick, H. S., Milanak, M. E., Miller, M. W., Keyes, K. M., & Friedman, M. J. (2013). National estimates of exposure to traumatic events and PTSD prevalence using DSM-IV and DSM-5 criteria. J*ournal of traumatic stress*, 26(5), 537-547.

International Society of Traumatic Stress Studies. (2019). Posttraumatic stress disorder prevention and treatment guidelines. Retrieved from http://www.istss.org/getattachment/Treating-Trauma/New-ISTSS-Prevention-and-Treatment-Guidelines/ISTSS_PreventionTreatmentGuidelines_ FNL.pdf.aspx

Murray, H., Merritt, C., & Grey, N. (2015). Returning to the scene of the trauma in PTSD treatment–why, how and when? *The Cognitive Behaviour Therapist*, 8, E28. doi:10.1017/S1754470X15000677

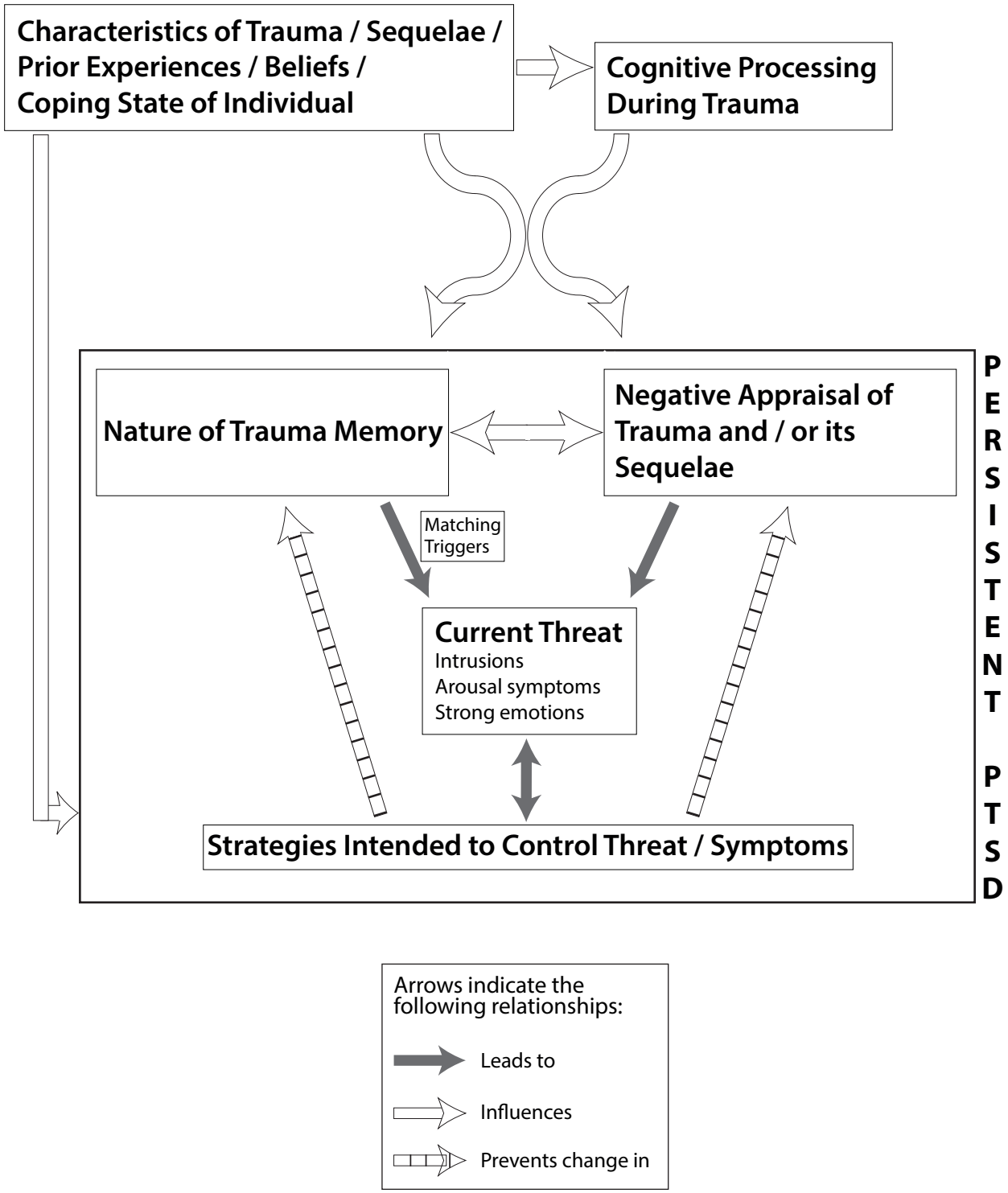
National Institute of Health and Clinical Excellence (2018). Posttraumatic stress disorder. Retrieved from www.nice. org.uk/guidance/ng116

Santiago, P. N., Ursano, R. J., Gray, C. L., Pynoos, R. S., Spiegel, D., Lewis-Fernandez, R., … & Fullerton, C. S. (2013). A systematic review of PTSD prevalence and trajectories in DSM-5 defined trauma exposed populations: Intentional and non-intentional traumatic events. PloS one, 8(4), e59236. doi: 10.1371/journal.pone.0059236

Schauer, M., & Elbert, T. (2015). Dissociation following traumatic stress. *Zeitschrift für Psychologie/Journal of Psychology*.

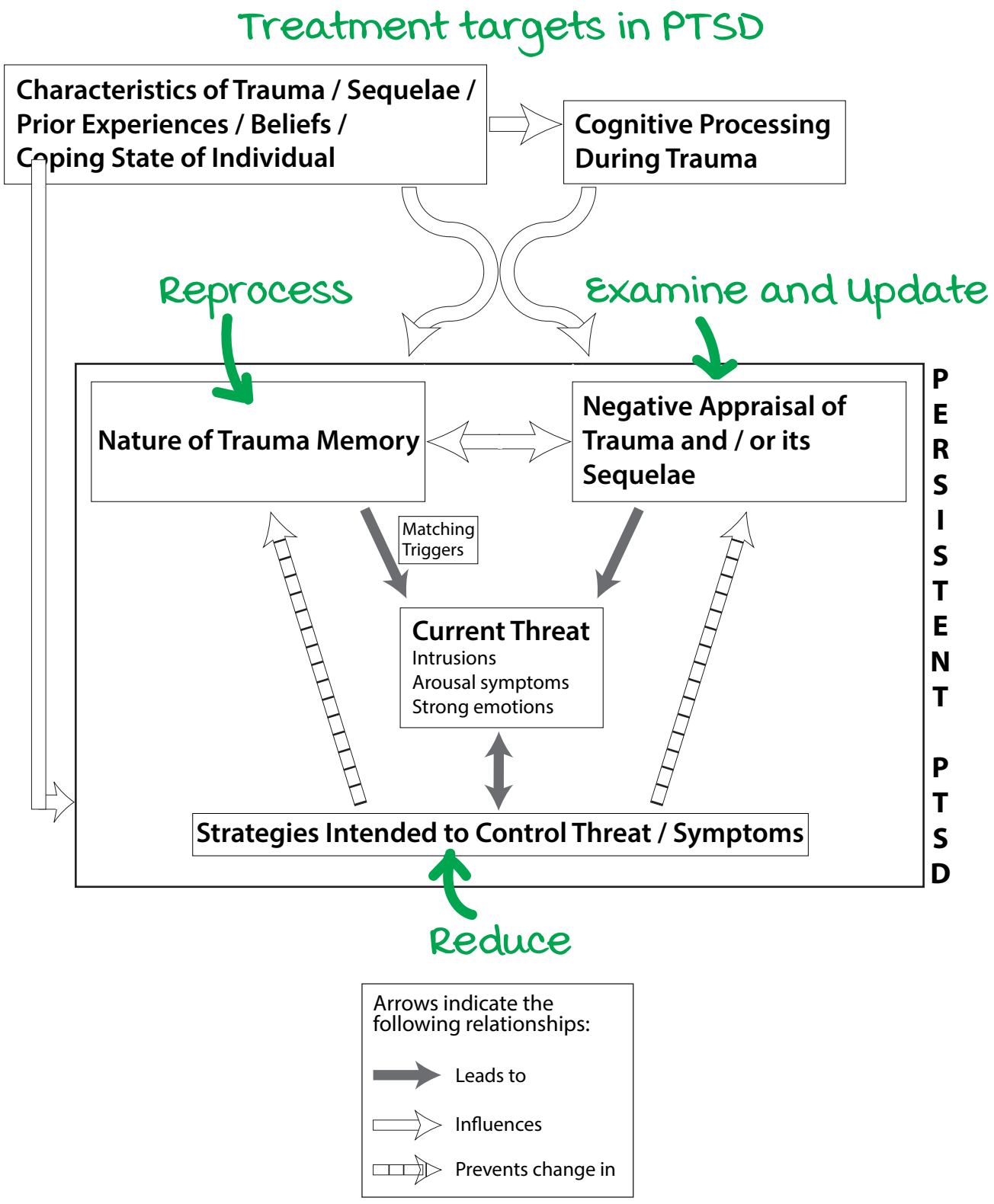
Wild, J., Warnock-Parkes, E., Murray, H., Kerr, A., Thew, G., Grey, N., ... & Ehlers, A. (2020). Treating posttraumatic stress disorder remotely with cognitive therapy for PTSD. *European journal of psychotraumatology,* 11(1), 1785818.

Cognitive Behavioral Model Of Post-Traumatic Stress Disorder (PTSD: Ehlers & Clark, 2000)



Ehlers, A., Clark, D. M. (2000). A cognitive model of posttraumatic stress disorder. *Behaviour Research and Therapy*, 38, 319-345.

Cognitive Behavioral Model Of Post-Traumatic Stress Disorder (PTSD: Ehlers & Clark, 2000)



Ehlers, A., Clark, D. M. (2000). A cognitive model of posttraumatic stress disorder. *Behaviour Research and Therapy*, 38, 319-345.

About us

PSYCHOLOGYTOOLS®

Psychology Tools develops and publishes evidence-based psychotherapy resources. We support mental health professionals to deliver effective therapy, whatever their theoretical orientation or level of experience.

Our digital library encompasses information handouts, worksheets, workbooks, exercises, guides, and audio skills-development resources.

Our tools are flexible enough to be used both in-session and between-session, and during all stages of assessment, formulation, and intervention. Written by highly qualified clinicians and academics, materials are available in digital and printable formats across a wide range of languages.

Resource details

Title: Cognitive Behavioral Model of Post Traumatic Stress Disorder (Ehlers & Clark, 2000)
Type: Information Handout
Language: English (US)
Translated title: Cognitive Behavioral Model of Post Traumatic Stress Disorder (Ehlers & Clark, 2000)

URL: https://www.psychologytools.com/resource/cognitive-behavioral-model-of-post-traumatic-stress-disorder-ptsd-ehlers-clark-2000/
Resource format: Professional
Version: 20230721
Last updated by: EB

Terms & conditions

This resource may be used by licensed members of Psychology Tools and their clients. Resources must be used in accordance with our terms and conditions which can be found at: https://www.psychologytools.com/terms-and-conditions/

Disclaimer

Your use of this resource is not intended to be, and should not be relied on, as a substitute for professional medical advice, diagnosis, or treatment. If you are suffering from any mental health issues we recommend that you seek formal medical advice before using these resources. We make no warranties that this information is correct, complete, reliable or suitable for any purpose. As a professional user, you should work within the bounds of your own competencies, using your own skill and knowledge, and therefore the resources should be used to support good practice, not to replace it.

Copyright