

CBT for Post-Traumatic Stress Disorder

CBT for PTSD

- Diagnosis and background
- Theories
- Evidence
- Assessment
- Formulation
- Treatment
- Troubleshooting

Diagnosis (DSM-IV-TR; American Psychological Association, 2000)

- Criterion A:

Exposure to a traumatic event in which both of the following were present:

- 1) The person witnessed or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of the self or others

- 2) The person's response involved individual experiences fear, helplessness or horror in response to threatened or actual death, or threat to the self-integrity of the self

Re-experiencing

- Criterion B – 1 or more re-experiencing phenomena
 - Recurrent and intrusive distressing recollections of the event, including images, thoughts or perceptions
 - Recurrent, distressing dreams
 - Acting or feeling as if the event were recurring – a sense of reliving, illusions, hallucinations, and dissociative flashbacks
 - Distress at exposure to internal or external cues that symbolise or resemble an aspect of the traumatic event
 - Physiological reactivity to internal or external cues that symbolise or resemble an aspect of the traumatic event
- Be alert for different sensory modalities to re-experiencing phenomena (e.g. smells, sounds, images, feelings)

Avoidance and numbing

- **Criterion C - Avoidance and numbing (3 or more)**
 - Efforts to avoid thoughts, feelings, or conversations associated with the trauma
 - Efforts to avoid activities, places, or people that arouse recollections of the trauma
 - Inability to recall important aspects of the trauma
 - Markedly diminished interest or participation in significant activities
 - Feelings of detachment or estrangement from others
 - Restricted range of affect
 - Sense of foreshortened future

Hyperarousal

- Criterion D - 2 or more symptoms of hyperarousal
 - Sleep difficulties
 - Anger
 - Concentration difficulties
 - Hyper-vigilance
 - Exaggerated startle response



Disturbance and Duration

- Present for more than one month (otherwise consider Acute Stress Disorder)
- Disturbing to important areas of functioning



Problems with PTSD Diagnosis

- PTSD symptoms may capture a limited aspect of posttraumatic psychopathology (van der Kolk and Courtois, 2005)
- Co morbid problems common in routine clinical practice and such patients often excluded from RCTs
- More than 80% of patients with PTSD have co-morbid disorders (Foa et al., 2000)
- Journal of Anxiety Disorders, 21, (2007)
- Brewin, C.R. (2003). Post-traumatic stress disorder: Malady or myth

Co-Morbidity

- Panic
- Generalised anxiety disorder
- Depression and suicide
- Substance misuse
- Anger / Forensic
- Neuropsychological impairments
- Chronic pain and other health problems
- Axis II disorders
- Psychosis
- OCD



Incidence of PTSD

Incidence

- Risk of developing PTSD after a traumatic event - 8.1% for men and 20.4% for women (Kessler *et al.*, 1995)

Course and Prognosis After Trauma (NICE, 2006)

- Onset of symptoms usually in first month after trauma
 - In <15% (McNally, 2003) may be a delay of months or years.
- Substantial natural recovery in initial stages
- High proportion of trauma survivors will initially develop symptoms of ASD/PTSD, most people will recover without tx
 - Steep decline in PTSD rates in first year (e.g. Breslau et al,1991; Kessler et al, 1995).
- At least 1/3 of individuals who develop PTSD remain symptomatic for 3 years+ and are at risk of secondary problems
- Likelihood that will benefit from treatment does not decrease with time since trauma (Gillespie et al, 2002; Resick et al, 2002).



Risk Factors – Impact of Previous Trauma

- Studies of rape victims (Frank and Anderson, 1987; Nishith, Mechanic, and Resick, 2000; Roth, Wayland, and Woolsey, 1990) have demonstrated a relationship between prior victimization, posttraumatic pathology, and problematic recovery.



Cognitive Risk Factors

- Negative cognitions about self, world and self-blame (Foa et al., 1999)
- Negative appraisals of symptoms, negative responses from others, and permanent change (Dunmore et al., 1999, 2001)
- Alienation, perceived permanent change, and ‘Mental defeat’ (Dunmore et al., 1999, 2001; Ehlers, Maercker and Boos., 2000)
 - Mental defeat - “the perceived loss of all autonomy, a state of giving up in one’s own mind all efforts to retain one’s identity as a human being with a will of one’s own”



Stress Response Theory – Horowitz (1976,1986)

- When faced with trauma, initial response is outcry
- Second response is to assimilate the information
- Defence mechanisms (e.g. denial, numbing, avoidance) may help during period of overload
- The need to reconcile will cause info to burst into consciousness in flashbacks etc
- Oscillation between intrusions and avoidance until trauma processing is complete
 - Failure to do so = PTSD



Ehlers and Clark's Cognitive Model of PTSD (2000)

- PTSD becomes persistent when processing of the event and/or its sequelae leads to a sense of serious, current threat.
- Sense of threat may be due to appraisals of the traumatic event and its sequelae, and the nature of the trauma memory.

Ehlers and Clark's Cognitive Model of PTSD (2000) - Appraisals

- Fact that trauma happened - ``Nowhere is safe''
- Trauma happened to me - ``Others can see that I am a victim''
- Behaviour/emotions during trauma - ``I cannot cope with stress''
- Initial PTSD symptoms
 - Irritability, anger outbursts - ``I can't trust myself''
 - Emotional numbing ``I'm dead inside'',
 - Flashbacks, intrusions and nightmares - ``I'm going mad'',
 - Difficulty concentrating ``My brain has been damaged''
- Other people's reactions after trauma
 - Positive responses ``They think I am too weak to cope''
 - Negative responses ``Nobody is there for me''
- Physical consequences ``My body is ruined''
- Perceived permanent change, mental defeat and alienation seem to be particularly pathogenic appraisals (Dunmore et al., 1999, 2001)



Ehlers and Clark's Cognitive Model of PTSD (2000) – Memory Representations

- Trauma memories fundamentally different to other autobiographical memories.
- Autobiographical memories
 - Organised
 - Contextualised
 - Characterised by “autonoetic awareness” (Tulving, 2002)
- Trauma memories
 - Poorly elaborated and incorporated into the autobiographical memory store
 - Not given a complete context in time and place.

Ehlers and Clark's Cognitive Model of PTSD (2000) – Coping strategies

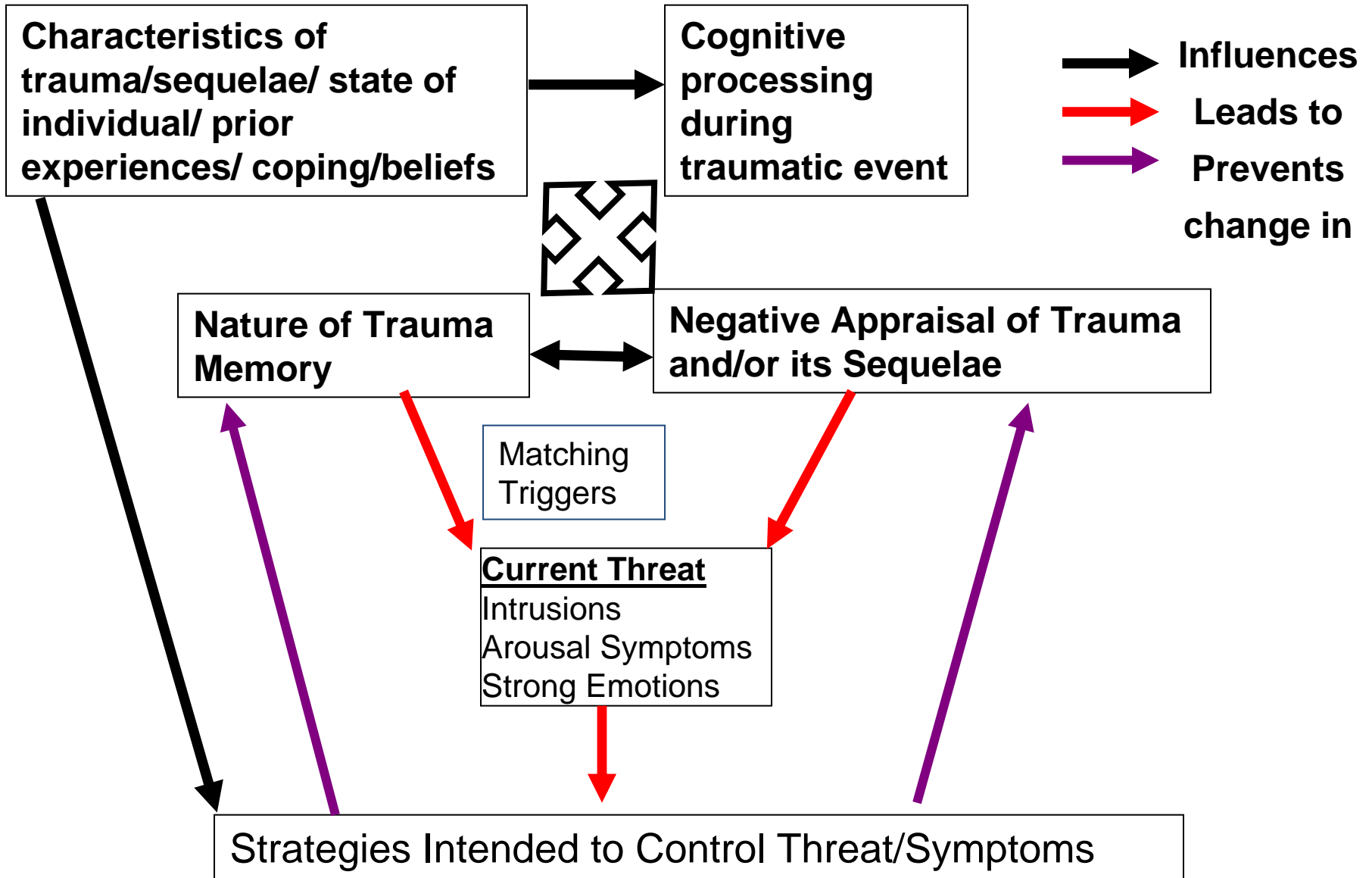
- Certain coping strategies may inadvertently maintain the disorder
 - Thought suppression (e.g. Steil and Ehlers, 2000)
 - Rumination (Steil and Ehlers, 2000)
 - Safety behaviours (Dunmore, Clark and Ehlers, 2001)
 - Avoidance of reminders (Bryant and Harvey, 1995)
 - Dissociation (Halligan et al., 2003)
- These strategies may produce PTSD symptoms, prevent change in appraisals, and prevent change in the trauma memory.



Ehlers and Clark's Cognitive Model of PTSD (2000)

- Characteristics of traumatic event, state factors, pre-trauma beliefs, coping etc. influence PTSD development and maintenance
- Model distinguishes between data-driven and conceptual processing.
- If peri-traumatic processing is predominately data-driven then:
 - Trauma memory may be difficult to retrieve
 - Strong perceptual priming for similar stimuli
 - Stimulus discrimination may be impaired.

Cognitive Model of PTSD (Ehlers & Clark, 2000)



Standard PTSD Treatment

- Different types of treatment may be described as CBT for PTSD
 - Stress inoculation training
 - In vivo exposure
 - Imaginal exposure
 - Cognitive restructuring
- Exposure based techniques for PTSD are effective (Bradley et al., 2005; Harvey et al., 2003; Roth and Fonagy, 2005).
- Most current CBT interventions for PTSD involve imaginal exposure (Richards and Lovell, 1999)

Prolonged Exposure

- Imaginal Exposure (IE)
 - Patient asked to vividly imagine the traumatic event for a prolonged period (typically at least 50 minutes)
 - Provides narrative in the first person, present tense
 - Focusing on the most distressing moments
 - Homework of listening to tape
- *In vivo* exposure
 - Graded exposure to feared situations

Benefits of Exposure (Harvey et al., 2003)

1. Promotes habituation
2. Corrects belief that anxiety remains unless you avoid
3. Impedes negative reinforcement of escape then fear reduction
4. Promotes incorporation of corrective information into the trauma memory
5. Establishes trauma as a discrete entity, not indicative of the world being threatening
6. Self-mastery through exposure



Factors That Impede Emotional Processing

- Jaycox and Foa, 1996
 - Anger
 - Emotional numbing
 - Overwhelming anxiety
- Lee, Scragg and Turner (2001)
 - Shame
 - Guilt
 - Humiliation
- Ehlers et al., 1998
 - Mental defeat
 - Alienation
 - Perceived permanent change



Assessment

- Establish safety and trust
- Problem description
 - Key cognitions, emotions, behaviours, and attentional changes
- Description of traumatic event(s) – non-reliving
 - Begin to identify ‘hotspots’
- Background info
- Suitability for treatment
- Identify therapy interfering cognitions and behaviour
- Normalising and psycho-education
- Socialisation into treatment

Assessment – Measures

- Clinician Administered PTSD Scale (CAPS) – Blake et al., 1995
- Impact of Events Scale – Revised (IES-R) – Weiss and Marmar, 1997
- Posttraumatic Stress Cognitions Inventory (PTCI) – Foa et al. (1999a)
- Posttraumatic Stress Disorder Scale (PDS) – Foa et al., 1997
- Dissociative Experiences Scale – II - Carlson and Putnam, 1993
- Co-morbid disorder specific measures

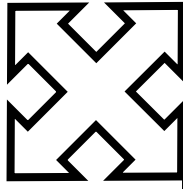


Characteristics of trauma/sequelae/ state of individual/ prior experiences/ coping/beliefs

Cognitive processing during traumatic event

- Influences
- Leads to
- Prevents change in

Nature of Trauma Memory



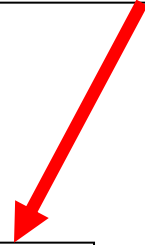
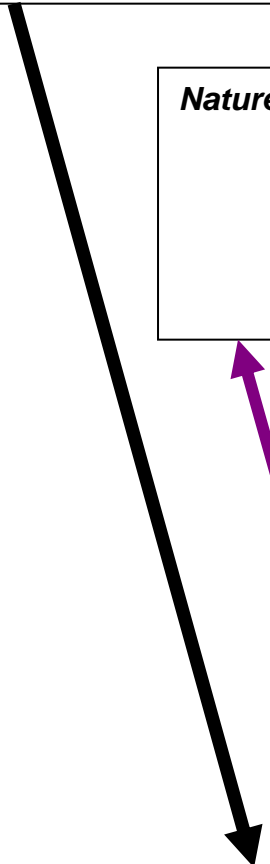
Negative Appraisal of Trauma and/or its Sequelae



Matching Triggers

Current Threat

Strategies Intended to Control Threat/Symptoms

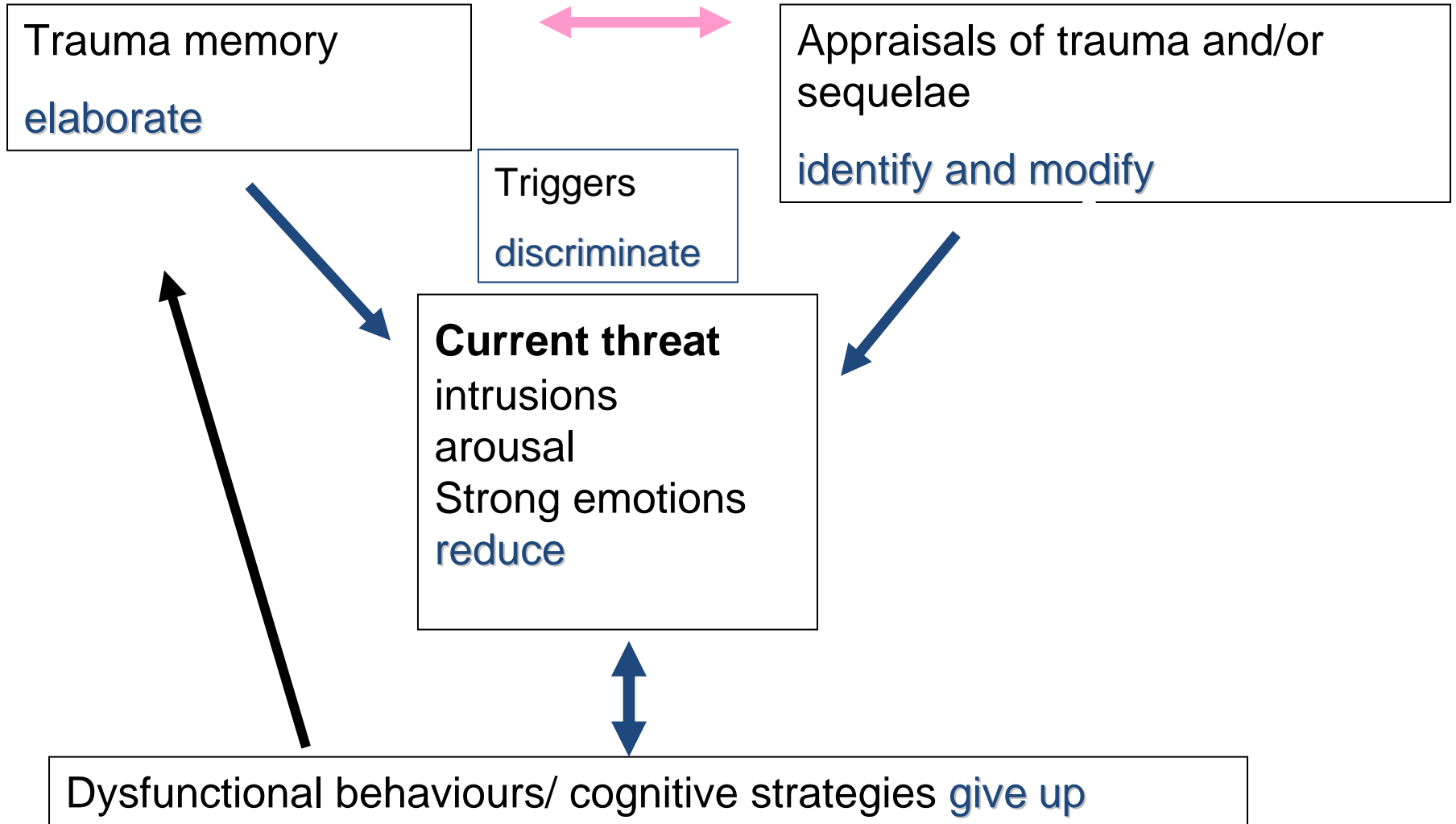


CBT Treatment (Ehlers and Clark, 2000) - I

- Treatment involves a number of components:
 - Modifying negative appraisals
 - Elaborating trauma memories and improving discrimination of triggers
 - Dropping dysfunctional behaviours and cognitive strategies.
- A range of CBT techniques may be used to achieve these aims
- The focus of this talk will be the Ehlers and Clark (2000) and Grey, Young and Holmes (2002) approaches

Treatment Goals

Clark and Ehlers (2004)





CBT Treatment (Grey et al., 2002; Ehlers and Clark, 2000) - II

- Stages of treatment include:
 - Assessment
 - Psychoeducation
 - Reliving with CR
 - In vivo exposure
 - Stimulus discrimination
 - Reducing avoidance and safety behaviours
 - Total duration of therapy likely to be between 8 and 20 sessions (Grey et al., 2002)

Psychoeducation

- Normalise
 - Symptoms as a common initial reaction to an abnormal event
 - The patient's ways of coping may have been helpful for milder stressful events but now may be maintaining the problem (thought suppression exercise may help)
- Educate
 - Cupboard/duvet analogy
 - Neuroanatomical / guard dog
- Reclaiming your life
 - 'memory talking' or trauma as robber (Stott et al., 2010)
 - Evidence for efficacy of Behavioural Activation for PTSD (Jakupcak et al., 2006)

Cupboard Analogy (Stott et al., 2010)

- Memory like a food cupboard
- Usually organised and add and remove things one at a time
- Trauma – given lots of tins etc and told “put them away, quick!!” - so cram things in and try to close doors
- But, things keep falling out because they don't fit – you push them back in, but same pattern occurs
- What do you need to do?

Phases in addressing peritraumatic emotional hotspots – Grey, Young and Holmes, 2002

Phase 1: initial reliving

- Rationale for reliving
- Identify peritraumatic emotional hotspots during reliving
- Identify associated cognitions/meanings

Phase 2: cognitive restructuring (CR) outside reliving

- Discuss hotspots and attempt CR outside reliving
- Rationale for CR within reliving
- Rehearse reappraisals for later reliving

Phase 3: cognitive restructuring within reliving

- Reliving of whole event/focus on specific hotspot
- Hold hotspot vividly in mind (rewind-and-hold)

How to tell 'hotspots' in reliving

Clues:

- affect change
 - Red
 - Shaky
 - Sweaty etc
- avoidance; change in tense & person
- skip over / whiz through parts
- gaps in narrative and missing content associated with flashbacks/intrusions

Safety Behaviours – Ehlers and Clark, 2000

- Patients may use a range of safety behaviours that reduce current threat but maintain the problem in the long term
 - Prevent trauma memory elaboration (e.g. avoidance of talking)
 - Prevent reappraisal
- Discuss problematic consequences of behaviour, then test dropping it

Appraisals and Associated Behavioural and Cognitive Strategies – Ehlers and Clark, 2000

Appraisal	Dysfunctional Strategies
If I think about the trauma...I'll go mad, lose control, heart attack etc	Thought suppression, alcohol / drugs / benzos, keep mind occupied, control feelings
If I have a flashback, then I will be unable to breathe and will suffocate	Sleep near the window
If I do not check for intruders then my family will be attacked	Stay up at night, hypervigilant to sounds outside flat
If I talk to my friends, then they will ask about the event and I'll fall apart	Avoid friends
If people see me and my stick, then they will see I'm weak and attack	Don't use walking stick, avoid eye contact, baseball cap

In Vivo Exposure / Behavioural Activation

- Revisiting the scene of the trauma may help to place memory in the past, also may help with discrimination of then and now
- Goal is to elaborate and reappraise situation
- Behavioural experiments for feared predictions
 - Drop safety behaviours
 - Facilitate full emotional exposure
 - Stimulus discrimination
- Emerging efficacy of the benefit of BA for PTSD (Janupak et al., 2006; Wagner et al., 2006)



Stimulus Discrimination – Clark and Ehlers, 2004

- Ehlers and Clark (2000) model suggests that trauma memory elaboration leads to better discrimination of then and now and that this may reduce probability of re-experiencing
- So, stimulus discrimination in 2 stages
 1. Identify when and where triggers occur
 2. Break the link between triggers and trauma memory – may help to discuss differences

Flashback halting protocol (adapted from Rothschild, 2000)

- Right now, I am feeling(name emotion),
- And I am sensing in my body..... (bodily feelings)
- Because I have been reminded of (name the trauma by title only – no details)
- By, (describe the trigger)
- At the same time, I am looking around where I am now in(the current year)
- Here in..... (the current location)
- And I can see, (describe surroundings)
- And so I know that the (traumatic event)
- Is not happening now / anymore



Factors That May Impede Emotional Processing

- Anger
- Shame
- Guilt
- Mental defeat
- Alienation
- Perceived permanent change
- Emotional numbing
- Overwhelming anxiety
- Avoidance of affect

Avoidance of Affect – Butler, Fennell, and Hackmann, 2008

- Many patients have a self-protective mode which helps them to avoid feelings and/or expressing emotions
- In PTSD AoA can impair emotional processing, may lead to negative appraisals, and safety behaviours
- May be a cultural dimension to this

Identifying Avoidance of Affect – Butler, Fennell, and Hackmann, 2008

- Common signs include:
 - Gaze changes
 - Fidgeting, change in position
 - Changing topic
 - Intellectualising
 - Rumination/worry
 - Jokes
 - Appears to not understand
 - Emotional disengagement/withdrawal
 - Keeps you talking
 - Indecisive
 - Goes blank, dissociates, forgets
 - Binge eating/drinking, drugs



Treating Avoidance of Affect – Butler, Fennell, and Hackmann, 2008

- Build safety within relationship
- Elicit feelings
 - Listen, reflect, notice when changes emerge
- Educate about emotions
- Decatastrophize
- External attention – examine the reactions of others
- Feedback about therapy
- Accept and validate negative feelings
- Recording – second chance to identify feelings
- Metaphor
- Reduce safety behaviours (see Butler and Surawy, 2004)

What causes dissociation?

1. Physical injury (e.g. head injury, temporal lobe epilepsy, pain)
2. Legal and illegal drugs (cannabis, benzodiazepines)
3. Psychological trauma

Why is dissociation important?

- Dissociation during trauma (peri-traumatic) is a significant predictor of PTSD
- High levels of post-traumatic dissociation are associated with more severe trauma –childhood trauma and/or chronic trauma (e.g. torture)
- Often present in people meeting criteria for Borderline Personality Disorder

Why does dissociation matter clinically?

Risks

- General – loss of awareness of surroundings, e.g. walking out into traffic etc.
 - use of self-harm to terminate dissociation
- Treatment- if someone is liable to dissociate during reliving, they will not be able to process the trauma memory.
- So need to teach them to control their dissociation using grounding strategies



Dissociation -Treatment

- Psycho-education about the relationship between dissociation and trauma – need to help people understand what is happening to them and why
- Need to formulate when dissociation occurs, what the triggers are, and what terminates it

Grounding Strategies

1. Attentional techniques (distracting attention from the trigger or refocussing attention on current surroundings)
 2. Grounding words or phrases (check trauma-related associations)
 3. Grounding Objects (e.g. stress balls)
 4. Grounding Images (safe place imagery)
 5. Sensory Stimuli (essential oils, polos)
- See Kennerley (1996)