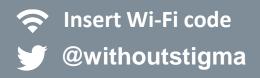


Trauma-Focused CBT: Conceptual underpinnings, key interventions, and extending its reach

Nick Grey

February 2020



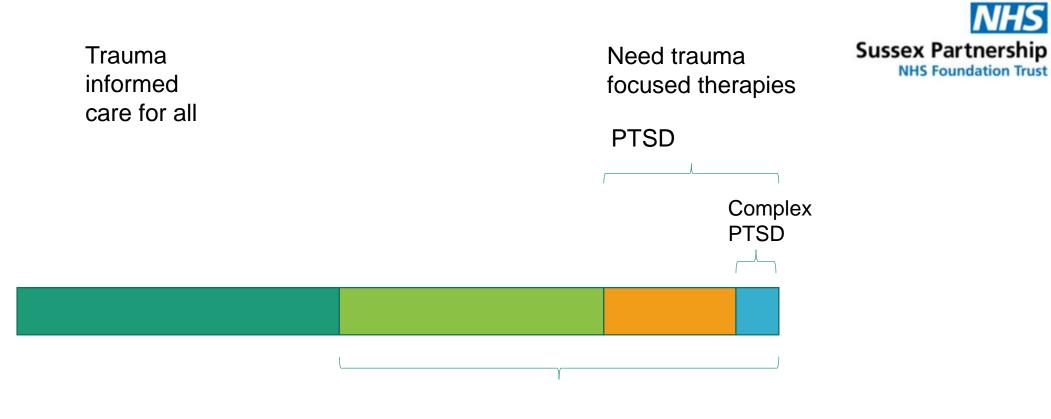


### TRANSFORMING PSYCHOLOGICAL TRAUMA: A Knowledge and Skills Framework for the Scottish Workforce

A particular with







People where trauma is important part of presentation So need more focus on trauma



# Speaking the same language...

### • Complex Trauma

- Description of someone's history
- May lead to various presenting problems
- BOTH 'what's happened?' and 'what do you want help with?'
- Complex PTSD
  - A particular presenting problem
- Treatment for presenting problems, rather than history: so we don't treat Complex Trauma...



**NHS Foundation Trust** 

### **Trauma and PTSD Working Group Glossary (BRIEF)**

1	+
1	+++
1	+

`Term	Definition/explanation			
Acute stress	Short lived changes in how we experience emotions, thoughts and the way we			
reaction	behave following a traumatic event. These are common and normal.			
Acute Stress	A mental health condition that may be diagnosed when somebody struggles			
Disorder	significantly in the month following a traumatic experience.			
Adverse childhood	Adverse Childhood Experiences are situations such as neglect, being abused or			
experience (ACE)	witnessing abuse, poverty, having parents who struggle with substance misuse or mental health difficulties.			
Borderline	See Emotionally Unstable Personality Disorder. The two terms are used			
Personality Disorder	interchangeably and are determined by the tool being used -Diagnostic and			
(BPD)	Statistical Manual 5 (DSM) or International Classification of Diseases (ICD) 11.			
Complex PTSD	This diagnosis might be given if someone meets the criteria for PTSD in addition to longstanding and significant difficulties with managing emotions, feeling weakened, defeated and worthless, and forming relationships with others. It is typically caused by traumas that involve being mistreated by others in very extreme ways, lasted many years or might have been very difficult to escape.			
Complex Trauma	A history of repeated trauma, usually caused by mistreatment by others, i.e. through childhood sexual abuse or domestic violence. This is not a medical condition; treatments offered are aimed at issues such as mental health difficulties that might arise as a result of having these experiences.			
Developmental	A form of complex trauma experience which, because occurring at early and critical			
Trauma	neriods of development, can radically compromise psychobiological, social and			

## ICD 11 PTSD

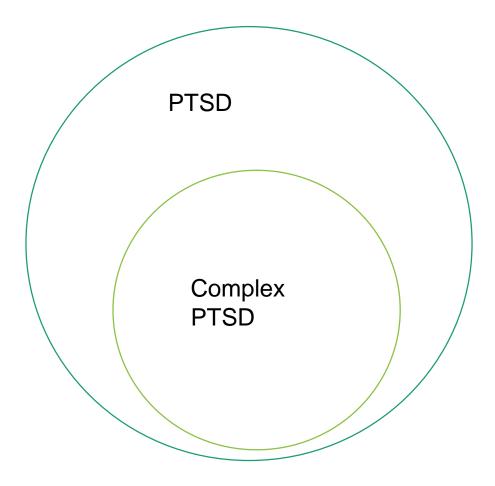
This disorder follows exposure to an extremely threatening or horrific event or series of events. It consists of 3 core elements: (a) **Reexperiencing**: vivid intrusive memories, flashbacks, or nightmares that involve reexperiencing in the present, accompanied by fear or horror; (b) Avoidance: marked internal avoidance of thoughts and memories or external avoidance of activities or situations reminiscent of the traumatic event(s); (c) Hyperarousal: a state of perceived current threat in the form of hypervigilance or an enhanced startle reaction. The symptoms must also last for several weeks and interfere with normal functioning.



# ICD-11 Complex PTSD

- Exposure to a stressor typically of an extreme or prolonged nature and from which escape is difficult or impossible such as torture, concentration camps, slavery, genocide campaigns and other forms of organized violence, domestic violence, and childhood sexual or physical abuse.
- Presence of the core symptoms of PTSD
- Following onset of the stressor event and co-occurring with PTSD symptoms, there is the development of persistent and pervasive impairments in affective, self and relational functioning
  - problems in affect regulation,
  - persistent beliefs about oneself as diminished, defeated or worthless,
  - persistent difficulties in sustaining relationships

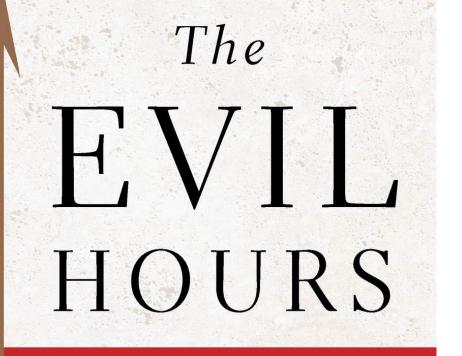




# You need to know what you're dealingsex Partnership with

- "traumatic" experiences
- "flashbacks"
- "PTSD"
- Need for careful assessment
- Match *re-experiencing symptoms* to the event
- Comorbidity and multiple problems are the rule rather than exception
- Other outcomes after trauma likely

"Provocative, exhaustively researched, and deeply moving . . . An essential book." – New York Times Book Review



A BIOGRAPHY of POST-TRAUMATIC STRESS DISORDER

## DAVID J. MORRIS



## "PTSD is a disease of time"



In the public domain

Psychotherapy



http://dx.doi.org/10.1037/pst0000231

#### A Guide to Guidelines for the Treatment of Posttraumatic Stress Disorder in Adults: An Update

AQ: au Jessica L. Hamblen AQ: 1 National Center for PTSD, White River Junction, Vermont, and Geisel School of Medicine at Dartmouth Sonya B. Norman National Center for PTSD, White River Junction, Vermont, and University of California San Diego School of Medicine

Andrea J. Phelps

University of Melbourne

Vanessa D. Nunes

Royal College of Obstetricians and Gynaecologists

Jeffrey H. Sonis University of North Carolina at Chapel Hill School of Medicine

Society for the Advancement

of Psychotherapy

Jonathan I. Bisson Cardiff University

Odette Megnin-Viggars Royal College of Obstetricians and Gynaecologists and University College London

David S. Riggs Uniformed Services University of the Health Sciences and Center for Deployment Psychology, Bethesda, Maryland David Forbes University of Melbourne

Paula P. Schnurr National Center for PTSD, White River Junction, Vermont, and Geisel School of Medicine at Dartmouth

Clinical practice guidelines (CPGs) are used to support clinicians and patients in diagnostic and treatment decision-making. Along with patients' preferences and values, and clinicians' experience and judgment, practice guidelines are a critical component to ensure patients are getting the best care based on the most updated research findings. Most CPGs are based on systematic reviews of the treatment literature. Although most reviews are now restricted to randomized controlled trials, others may consider nonrandomized effectiveness trials. Despite a reliance on similar procedures and data, methodological decisions and the interpretation of the evidence by the guideline development panel can result in different recommendations. In this article, we will describe key methodological points for five recently released CPGs on the treatment of posttraumatic stress disorder in adults and highlight some of the differences in both the process and the subsequent recommendations.

#### Psychological Medicine

cambridge.org/psm

#### **Review Article**

**Cite this article:** Karatzias T *et al* (2019). Psychological interventions for ICD-11 complex PTSD symptoms: systematic review and meta-analysis. *Psychological Medicine* 1–15. https://doi.org/10.1017/ S0033291719000436

Received: 3 August 2018 Revised: 11 February 2019 Accepted: 15 February 2019

#### Key words:

Childhood trauma; CPTSD; meta-analysis; psychological therapies; randomised controlled trials; systematic review

#### Author for correspondence:

Thanos Karatzias, E-mail: t.karatzias@napier. ac.uk

### Psychological interventions for ICD-11 complex PTSD symptoms: systematic review and meta-analysis



Thanos Karatzias<sup>1,2</sup>, Philip Murphy<sup>1</sup>, Marylene Cloitre<sup>3,4</sup>, Jonathan Bisson<sup>5</sup>, Neil Roberts<sup>5,6</sup>, Mark Shevlin<sup>7</sup>, Philip Hyland<sup>8</sup>, Andreas Maercker<sup>9</sup>, Menachem Ben-Ezra<sup>10</sup>, Peter Coventry<sup>11</sup>, Susan Mason-Roberts<sup>1</sup>, Aoife Bradley<sup>1</sup> and Paul Hutton<sup>1</sup>

<sup>1</sup>Edinburgh Napier University, School of Health & Social Care, Edinburgh, UK; <sup>2</sup>NHS Lothian, Rivers Centre for Traumatic Stress, Edinburgh, UK; <sup>3</sup>Department of Psychiatry and Behavioral Sciences, Stanford University, California, USA; <sup>4</sup>National Center for PTSD, Veterans Affairs Palo Alto Health Care System, Palo Alto, CA, USA; <sup>5</sup>Cardiff University, School of Medicine, Cardiff, UK; <sup>6</sup>Psychology and Counselling Directorate, Cardiff and Vale University Health Board, Cardiff, UK; <sup>7</sup>Ulster University, School of Psychology, Derry, UK; <sup>8</sup>National College of Ireland, School of Business, Dublin, Ireland; <sup>9</sup>Department of Psychology, Psychopathology and Clinical Interventions, University of Zurich, Zurich, Switzerland; <sup>10</sup>School of Social Work, Ariel University, Ariel, Israel and <sup>11</sup>Department of Health Sciences and Centre for Reviews and Dissemination, University of York, York, UK

#### Abstract

**Background.** The 11th revision to the WHO International Classification of Diseases (ICD-11) identified complex post-traumatic stress disorder (CPTSD) as a new condition. There is a pressing need to identify effective CPTSD interventions.

**Methods.** We conducted a systematic review and meta-analysis of randomised controlled trials (RCTs) of psychological interventions for post-traumatic stress disorder (PTSD), where participants were likely to have clinically significant baseline levels of one or more CPTSD symptom clusters (affect dysregulation, negative self-concept and/or disturbed relationships). We searched MEDLINE, PsycINFO, EMBASE and PILOTS databases (January 2018), and examined study and outcome quality.

**Results.** Fifty-one RCTs met inclusion criteria. Cognitive behavioural therapy (CBT), exposure alone (EA) and eye movement desensitisation and reprocessing (EMDR) were superior to usual care for PTSD symptoms, with effects ranging from g = -0.90 (CBT; k = 27, 95% CI -1.11 to -0.68; moderate quality) to g = -1.26 (EMDR; k = 4, 95% CI -2.01 to -0.51; low quality). CBT and EA each had moderate-large or large effects on negative self-concept, but only one trial of EMDR provided useable data. CBT, EA and EMDR each had moderate or moderate-large effects on disturbed relationships. Few RCTs reported affect dysregulation data. The benefits of all interventions were smaller when compared with non-specific interventions (e.g. befriending). Multivariate meta-regression suggested childhood-onset trauma was associated with a poorer outcome.

**Conclusions.** The development of effective interventions for CPTSD can build upon the success of PTSD interventions. Further research should assess the benefits of flexibility in inter-





# Evidence based therapies for PTSD

- Trauma-focused CBTs
  - Prolonged Exposure (Foa)
  - Cognitive Processing Therapy (Resick)
  - Narrative Exposure Therapy (Elbert, Schauer & Neuner)
  - Cognitive Therapy for PTSD (Ehlers & Clark)
- Eye Movement Desensitization and Reprocessing (EMDR; Shapiro)

# Evidence base



- PTSD NICE Guidelines (2018)
  - TF-CBT and EMDR; medication strictly secondary
- Additional complex needs
  - build in extra time to develop trust with the person, by increasing the duration or the number of therapy sessions according to the person's needs
  - take into account the safety and stability of the person's personal circumstances (for example their housing situation) and how this might affect engagement with and success of treatment
  - help the person manage any issues that might be a barrier to engaging with trauma-focused therapies, such as substance misuse, dissociation, emotional dysregulation, interpersonal difficulties or negative selfperception
  - work with the person to plan any ongoing support they will need after the end of treatment, for example to manage any residual PTSD symptoms or comorbidities.







#### INVITED REVIEW ARTICLE Psychotherapies for PTSD: what do they have in common?

#### Ulrich Schnyder<sup>1</sup>\*, Anke Ehlers<sup>2</sup>, Thomas Elbert<sup>3</sup>, Edna B. Foa<sup>4</sup>, Berthold P. R. Gersons<sup>5</sup>, Patricia A. Resick<sup>6</sup>, Francine Shapiro<sup>7</sup> and Marylène Cloitre<sup>8,9</sup>

<sup>1</sup>Department of Psychiatry and Psychotherapy, University Hospital Zurich, University of Zurich, Switzerland; <sup>2</sup>Department of Experimental Psychology, University of Oxford, Oxford, UK; <sup>3</sup>Department of Psychology, University of Konstanz, Konstanz, Germany; <sup>4</sup>Center for the Treatment and Study of Anxiety, Department of Psychiatry, University of Pennsylvania, Philadelphia, PA, USA; <sup>5</sup>Academic Medical Center, University of Amsterdam, Diemen, The Netherlands; <sup>6</sup>Department of Psychiatry and Behavioral Sciences, Division of Translational Science, Duke University Medical Center, Durham, NC, USA; <sup>7</sup>Mental Research Institute, Palo Alto, CA, USA; <sup>8</sup>National Center for PTSD—Dissemination & Training Division, VA Palo Alto Health Care System, Palo Alto, CA, USA; <sup>9</sup>NYU Langone Medical Center, New York City, NY, USA

Over the past three decades, research and clinical practice related to the field of traumatic stress have developed tremendously. In parallel with the steady accumulation of basic knowledge, therapeutic approaches have been developed to treat people suffering from posttraumatic stress disorder (PTSD) and other traumarelated psychological problems. Today, a number of evidence-based treatments are available. They differ in various ways; however, they also have a number of commonalities. Given this situation, clinicians may wonder which treatment program to use, or more specifically, which treatment components are critical for a successful therapy. In this article, seven pioneers who have developed empirically supported psychotherapies for trauma-related disorders were asked to compose an essay of three parts: first, to provide a brief summary of the treatment they have developed; second, to identify three key interventions that are common and critical in treating PTSD; and third, to suggest important topics and future directions for research. The paper ends with a summary highlighting the identified commonalities (psychoeducation; emotion regulation and coping skills; imaginal exposure; cognitive processing, restructuring, and/or meaning making; emotions; and memory processes), pointing to future directions such as trying to better understand the underlying mechanisms of action, and developing treatments that are tailored to the needs of different patient groups.

Keywords: Psychotraumatology; posttraumatic stress disorder; complex PTSD; psychotherapy; exposure; cognitive restructuring; psychoeducation

Treatment commonalities (Schnyder et al, 2015)

- Psychoeducation
- Emotion regulation and coping skills
- Imaginal exposure
- Cognitive processing/restructuring/meaning making
- Emotions as the guide
- Creating a coherent trauma narrative





The art of dealing with ghosts is to dare to look at them long and hard until you know that is what they are. Ghosts. Lifeless, powerless ghosts

• Jo Nesbo

### Mechanisms of change in psychological interventions for posttraumatic stress symptoms: A systematic review with recommendations

Samuli Kangaslampi<sup>1</sup> 🕞 • Kirsi Peltonen<sup>1</sup> 🕞

© The Author(s) 2019

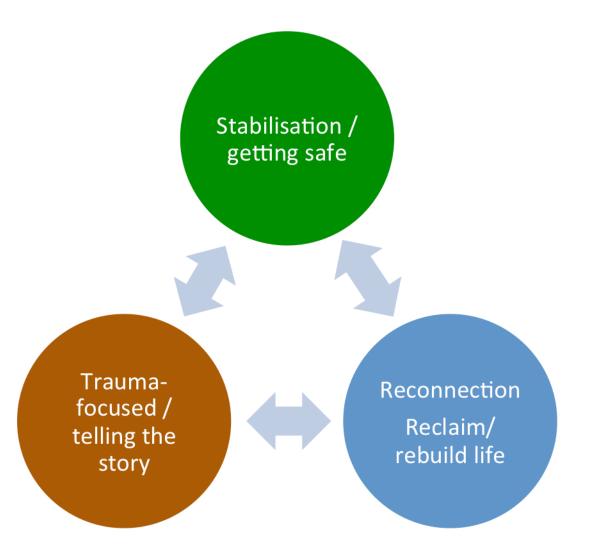
#### Abstract

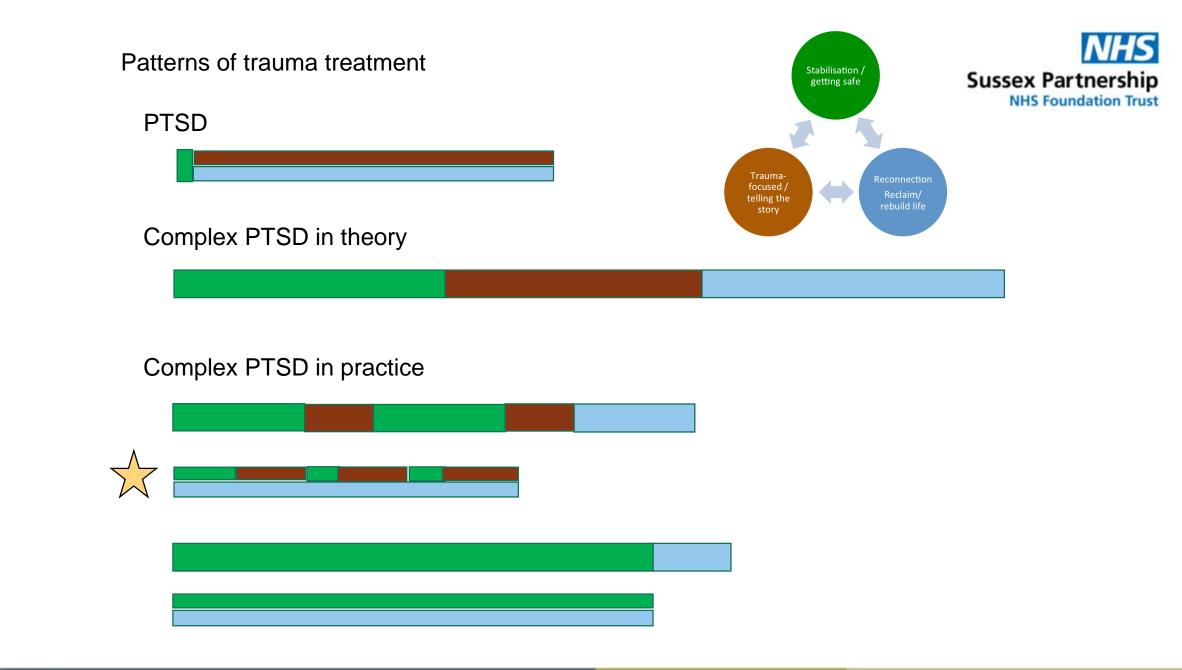
Psychological interventions can alleviate posttraumatic stress symptoms (PTSS). However, further development of treatment approaches calls for understanding the mechanisms of change through which diverse interventions affect PTSS. We systematically searched the literature for controlled studies of mechanisms of change in psychological interventions for PTSS. We aimed to detect all empirically studied mechanisms and evaluate the level of evidence for their role in the alleviation of PTSS. We identified 34 studies, of which nine were among children. We found evidence for improvements in maladaptive posttraumatic cognitions as a general mechanism of change involved in diverse interventions, among both adults and children. We also found











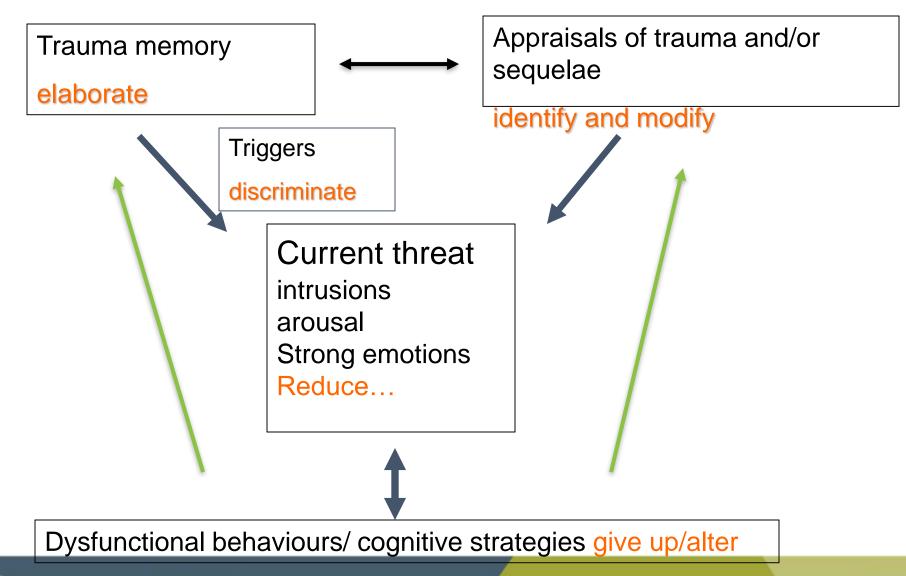


## Persistent PTSD (Ehlers & Clark, 2000)

## Negative Appraisal of Nature of Trauma Trauma and/or its Sequelae Memory Matching Triggers **Current Threat** Intrusions Arousal Symptoms **Strong Emotions** Strategies Intended to Control Threat/Symptoms

### Treatment Goals Ehlers & Clark (2000)







# Why work with trauma memories?

- access meanings
- restructure meanings
- behavioural experiment
- memory reconstruction / elaboration



# Ways of being memory focused

- Talking about what happened
- Reliving
- Written narratives
- Timelines
- Stimulus discrimination (then vs. now)
- Site visit

Situation	Cognition	Emotion	Sussex Partnership
Y-fronts removed at gunpoint	They' re going to shoot me and kill me.	Terrified	
Get an erection when penetrated	I must have wanted this to happen. I must be gay.	Ashamed	
Left on floor at end	I should' ve known this would happen. It's my fault.	Guilty	

Situation	Cognition	Emotion	Update ("what I know now") Su	SSEX Partnership
Y-fronts removed at gunpoint	They' re going to shoot me and kill me.	Terrified	They don't shoot me. I don't die.	
Get an erection when penetrated	I must have wanted this to happen. I must be gay.	Ashamed	It's a normal physiological response. It doesn't mean I wanted it to happen. It doesn't mean I'm gay.	
Left on floor at end	I should' ve known this would happen. It' s my fault.	Guilty	It's not my fault. I couldn't' ve known what was going to happen. [They] are to blame. They are bad people.	

## Updating trauma memory I



- The worst didn't happen
- Belief: "I' m going to die

Situation	Thought /	Feeling /	Restructuring		
	meaning at time	emotion <i>at</i>	"what do you know now?	Emotion	Emotior
	of trauma	time of trauma	In reality what is the	rating	rating
			case?"	before	after
See gun	I'm going to die	Fear	I don't die	50	5/10
Guy comes round side and says	I'm going to die	Fear		50	0
"Abacha man we don't want you here."	I won't see my son again.	Sadness	I see my son again	50	0
Hit, kicked, hear bang.	I'll be killed	Fear	I survive	30	0



## Update tape

• Excerpt 1

# Updating trauma memory II



- "I' m trapped"
- Physical movement to update
- (not all meanings shown in table)

Situation	Thought/meaning	Feeling	Update
Fingers inside me	I'm dirty and horrible	Disgust	It's not my choice. I don't want to be here, it's him, I'm not dirty and disgusting, he was doing something disgusting.
Inside my mouth	I'm trapped, I can't do anything	Fear and helplessness	I was trapped then but I'm not now [stand up, move arms].



# Multiple events

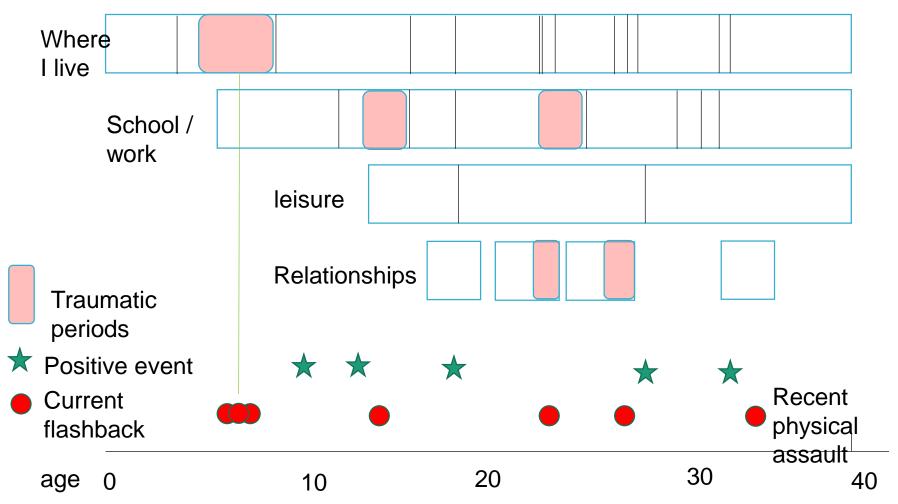
- Identify key re-experiencing symptoms, key meanings, and contexts
- Start with developing a timeline
- What to go for first
  - What intrusions?
  - Client preference
- More than one at a time?
  - Common cognitive themes
  - Explicitly encourage generalization
- Narrative Exposure Therapy



## Timeline

- Facts, context (social, occupational etc), i.e. key events not just trauma
- Re-experiencing symptoms
- Beliefs
- Where to start and stop
  - Birth? When traumas began?
  - When traumas ended? Present day? Future?
- Be flexible and creative
  - 'enlarge' sections, use photos etc

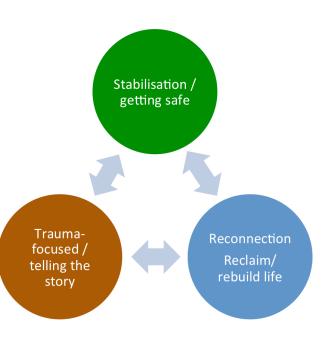






# Breaking trigger links

- Stimulus discrimination
- THEN vs NOW
- Memory work and also stabilization?





## Breaking the link with the past memory: Stimulus discrimination



- Identify triggers for intrusions (obvious & hidden)
- Memory triggers diary
- Then vs Now
- Practise



### THEN

- Dark can't see
- Feel bad
- Group of people
- People attacking
- Couldn't open eyes
- Outdoors
- Hand broken
- Knife in mouth
- Can't move

NOW

- Dark can't see
- Feel bad
- One person
- People helping
- Can open eyes
- Indoors
- Hand OK
- Chewing gum in mouth
- Can move

### https://oxcadatresources.com/



### **OXCADAT RESOURCES**

RESOURCES FOR COGNITIVE THERAPY FOR PTSD AND SOCIAL ANXIETY DISORDER.

OXCADAT

WELCOME PUBLICATIONS ~

SOCIAL ANXIETY DISORDER 🗸

DRDER V PTSD V

PANIC DISORDER 🗸

GIVE FEEDBACK

### **PTSD Training Videos**

These videos are designed to illustrate key techniques in cognitive therapy for PTSD, based on the Ehlers and Clark (2000) model. The videos are distillations of sessions and as such as shorter than would be expected in a normal therapy session. They are intended for use by qualified therapists under supervision. Please note that more training videos are being currently produced, so this does not represent a full list of all the techniques used in CT-PTSD.

### PTSD Questionnaires and Therapy Materials

On this page you will find some questionnaires developed by our team to help support delivery of cognitive therapy for PTSD. More general resources can be found on the US department of veterans affairs PTSD website.

#### **Core techniques**

1. Reclaiming your life

2. Behavioural experiments

### **PTSD** related questionnaires

Safety Behaviours Questionnaire (SBQ)

Response to Intrusions Questionnaire (RIQ)

Post-traumatic cognitions questionnaire (PTCI)

#### Memory work

1. Imaginal Reliving

8. In person site visit

2. Narrative Writing- When and why to use narrative writing

9. Site visit via images such as Google Earth

10. Spotting memory triggers

#### **Therapy Materials**

Therapy Blueprint for patients finishing a course of cognitive therapy for PTSD Understanding Posttraumatic Stress Disorder- a document for friends and family

# Why treat trauma in psychosis?



- High rates of trauma (particularly multiple, victimization events) and PTSD compared to the general population (Grubaugh et al., 2011)
- Co-morbid PTSD and psychosis associated with worse clinical and functional outcomes (Subica et al., 2013)
- Meta-analysis of large-scale cross-sectional, prospective and case control studies, approximately 80,000 participants (Varese et al., 2012)

> Causal, dose-response relationship between childhood victimisation, psychosis symptoms and diagnosis, with a population attributable risk of 33%

#### Research

### VHS ership

#### **Original Investigation**

## Prolonged Exposure vs Eye Movement Desensitization and Reprocessing vs Waiting List for Posttraumatic Stress Disorder in Patients With a Psychotic Disorder A Randomized Clinical Trial

David P. G. van den Berg, MSc; Paul A. J. M. de Bont, MSc; Berber M. van der Vleugel, MSc; Carlijn de Roos, MSc; Ad de Jongh, PhD; Agnes Van Minnen, PhD; Mark van der Gaag, PhD

**IMPORTANCE** The efficacy of posttraumatic stress disorder (PTSD) treatments in psychosis has not been examined in a randomized clinical trial to our knowledge. Psychosis is an exclusion criterion in most PTSD trials.

**OBJECTIVE** To examine the efficacy and safety of prolonged exposure (PE) therapy and eye movement desensitization and reprocessing (EMDR) therapy in patients with psychotic disorders and comorbid PTSD.



HYPOTHESIS AND THEORY published: 23 May 2017 doi: 10.3389/fpsyg.2017.00697





#### Pathways from Trauma to Psychotic Experiences: A Theoretically Informed Model of Posttraumatic Stress in Psychosis

#### Amy Hardy<sup>1,2\*</sup>

<sup>1</sup> Institute of Psychiatry, Psychology & Neuroscience, King's College London, London, UK, <sup>2</sup> Psychosis Clinical Academic Group, South London and Maudsley NHS Foundation Trust, London, UK

In recent years, empirical data and theoretical accounts relating to the relationsh between childhood victimization and psychotic experiences have accumulated. Muc of this work has focused on co-occurring Posttraumatic Stress Disorder or putativ causal mechanisms in isolation from each other. The complexity of posttraumat stress reactions experienced in psychosis remains poorly understood. This pap Integrated Trauma-Focused Cognitive-Behavioural Therapy for Post-traumatic Stress and Psychotic Symptoms: A Case-Series Study Using Imaginal Reprocessing Strategies

#### Nadine Keen<sup>1,2\*</sup>, Elaine C. M. Hunter<sup>1,2</sup> and Emmanuelle Peters<sup>2,1</sup>

<sup>1</sup>South London and Maudsley NHS Foundation Trust, Psychological Interventions Clinic for outpatients with Psychosis (PICuP), London, United Kingdom, <sup>2</sup>Department of Psychology, Institute of Psychiatry, Psychology and Neuroscience, King's College London, United Kingdom

#### Edited by:

OPEN ACCESS

Kim T. Mueser, Boston University, United States

*Kim T. Mueser, J. United States Reviewed by: Despite high rates of trauma in individuals with psychotic symptoms, post-traumatic stress symptoms are frequently overlooked in clinical practice. There is also reluctance to treat post-traumatic symptoms in case the therapeutic procedure of reprocessing the* 

frontiers in Psychiatry

ORIGINAL RESEARCH published: 01 June 2017 doi: 10.3389/fpsyt.2017.00092

> Check for updates

OPEN ACCESS

Edited by:

## **STAR Trial**

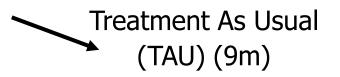
## (Study of Trauma And Recovery) Starting May 2020

## Who?

300 participants with distressing post-traumatic stress and psychosis symptoms (60 per site)

## What intervention?

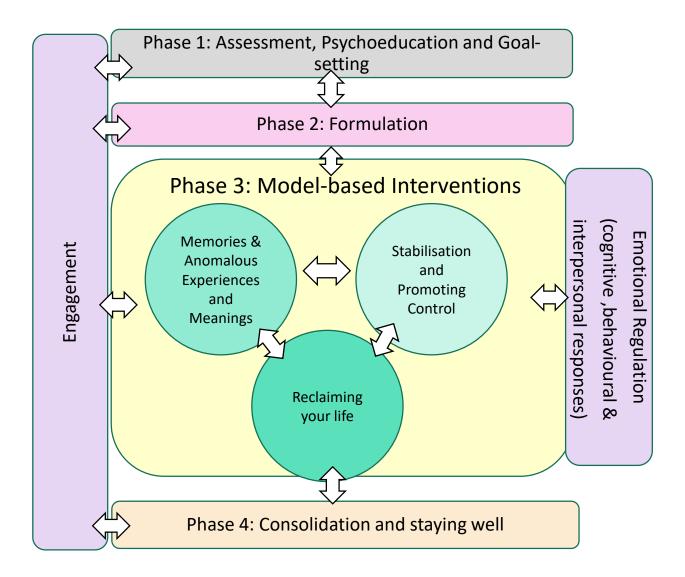
Trauma-Focused Cognitive Behaviour Therapy for psychosis (TF-CBTp) + TAU (9m)



## What outcomes?

Primary: PTSD at end of therapy

Secondary: Psychosis, emotional problems, functioning, health economics Are therapeutic gains maintained at 15m follow-up (2 yrs post baseline)



### **STAR Trial: Therapy Protocol Overview**

## STAR Trial (Study of Trauma And Recovery)

- Why? Does trauma-focused CBTp reduce PTSD symptoms, psychosis symptoms, distress and functioning problems, and is it cost-effective, over 2 years?
- Who? 300 participants with PTSD and distressing psychosis.
- Where? 5 sites (Sussex, London, Manchester, Oxford & Newcastle)
- What? Randomised to trauma-focused CBT for psychosis + treatment as usual *or* treatment as usual for 9 months.
- How? Clinicians only need to obtain verbal consent for the research team to contact people for an eligibility assessment, we'll do the rest!
- Starting May 2020!

**Applicants:** Emmanuelle Peters (PI), Tony Morrison, Filippo Varese, Eleanor Longden, Samantha Bowe, Rob Dudley, Craig Steel, Kathy Greenwood, Nadine Keen, Amy Hardy, Richard Emsley, Sarah Byford, Margaret Heslin **Trial Managers:** Sarah Swan, Raphael Underwood **Collaborators:** Nick Grey, Doug Turkington, Elizabeth Kuipers, David Fowler.





## nick.grey@sussexpartnership.nhs.uk

## www.researchgate.net/profile/Nick\_Grey







**NHS** National Institute for Health Research

