The memory and identity theory of CPTSD

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1. Complex PTSD in ICD-11

ICD-11 PTSD & CPTSD

Posttraumatic Stress Disorder

- 1. Re-experiencing in the here and now
 - Nightmares & Flashbacks
- 2. Avoidance of trauma reminders
 - Internal & External
- 3. Sense of current threat
 - Hypervigilance & Hyperarousal

Disturbances in Self-Organisation

- 4. Affective dysregulation
 - Hyperactivation & Numbing
- 5. Negative self-concept
 - Failure & Worthless
- 6. Disturbed relationships
- Distant from others & Hard to stay close to others

ICD-11 PTSD & CPTSD – Population Prevalence

Country	PTSD	CPTSD	Total
Germany (2018) *	1.5%	0.5%	2.0%
USA (2019)	3.4%	3.8%	7.2%
Ireland (2019)	5.0%	7.7%	12.7%
Israel (2020)	6.7%	4.9%	11.2%
Germany (2022) *	1.4%	2.5%	3.9%
Lithuania (2022)	5.8%	1.8%	7.6%
Ukraine (2023)	11.1%	9.2%	20.3%
Hong Kong (2024)	1.7%	4.2%	5.9%
Ireland (2024)	2.4%	8.8%	11.2%
Ukraine (2024)	14.4%	8.9%	23.3%
Netherlands (2025)	1.0%	1.6%	2.6%
Mean	5.0%	5.0%	10.0%

^{*} very limited assessment of trauma exposure.

2. The Memory & Identity Theory of ICD-11 Complex PTSD

CPTSD Theory



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The Memory and Identity Theory of *ICD-11* Complex Posttraumatic Stress Disorder

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Two key questions a theory needed to answer

- Prior to ICD-11, there was no distinction made between 'core' PTSD symptoms & DSO symptoms.
 - Existing theories of PTSD had no need to explain this distinction.

 The empirical evidence indicated that PTSD and DSO symptoms can be functionally independent – different causal pathways must therefore exist.

1. What are the mechanisms that can give rise to the PTSD and DSO symptoms?

Two key questions a theory needed to answer

- Most theories of PTSD are modelled on a single overwhelming event that would trigger a traumatic response in most people.
- ICD-11 places a special focus on repetitive trauma, and there are different outcomes from trauma exposure (PTSD & CPTSD).
- Multiple, chronic, or early life trauma is a risk factor for CPTSD but PTSD can develop after these types of trauma and CPTSD can develop after a single traumatic event.
- 2. Theory must account for why PTSD & CPTSD can occur following different types of trauma.

Foundations of the theory – memory and identity

Not proposing anything radically new in this theory.

• PTSD has long been recognized as a disorder of memory and identity.

 We focused on these well-established causal mechanisms to explain how PTSD and DSO symptoms can occur after different types of trauma.



Figure 3 The Memory and Identity Theory of ICD-11 Complex Posttraumatic Stress Disorder

Trauma Exposure

- Type of event: Non-interpersonal vs interpersonal, later vs earlier in development, isolated event vs multiple forms of trauma
- Peri-traumatic reactions: Absence vs presence of tonic immobility, psychic and somatic dissociation, cognitive overload, extreme emotions

Lower Risk

Higher Risk

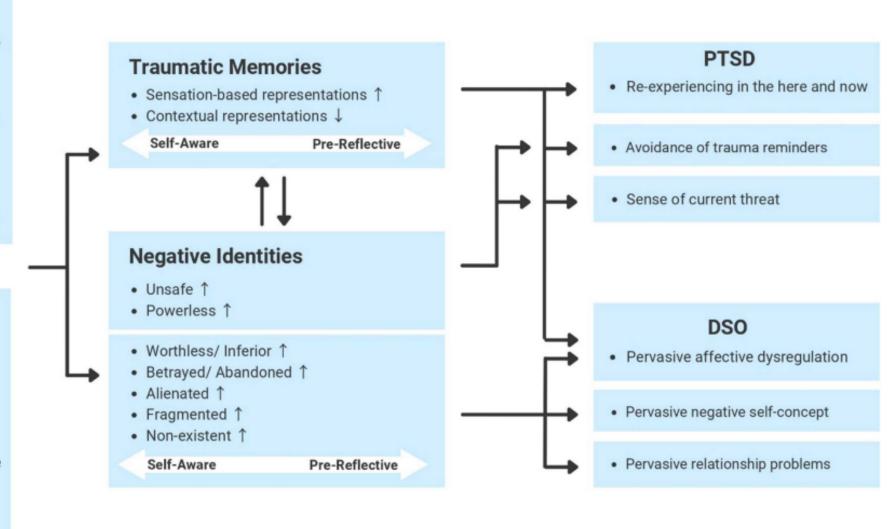


Individual Vulnerability

- Pre-trauma: Absence vs presence of previous psychopathology, previous trauma exposure, other adverse childhood experiences, disrupted attachments, unintegrated pre-reflective experience
- Post-trauma: Absence of social support, presence of loneliness, additional stress, unhelpful coping strategies

Lower Risk

Higher Risk



3. Empirical testing of the Memory & Identity Theory of ICD-11 CPTSD

CPTSD Theory Testing

- I will summarise findings from two studies we have done.
- Hyland, P., Shevlin, M., Martsenkovskyi, D., Ben-Ezra, M., & Brewin, C. R. (2024). Testing predictions from the Memory and Identity Theory of ICD-11 Complex Posttraumatic Stress Disorder: Measurement development and initial findings. *Journal of Anxiety Disorders*, 105, 102898. https://doi.org/10.1016/j.janxdis.2024.102898
- Hyland, P., Broughill, M., Shevlin, M., & Brewin, C. R. (2025). Memory and identity processes in ICD-11 complex posttraumatic stress disorder: Tests of a new theory. *Journal of Anxiety Disorders*, 114, 103055. https://doi.org/10.1016/j.janxdis.2025.103055

• These studies are based on data collected from two general population, quasi-representative samples from...

- Ukraine (N = 2050)
- United Kingdom (N = 975)

• First things first, measurement!

- Can we measure the core theoretical constructs?
 - Traumatic memories (Experiences of Traumatic Memories Questionnaire)
 - Negative identities (Trauma Identity Questionnaire)
 - https://www.traumameasuresglobal.com/manditheory

• Used a mix of exploratory and confirmatory factor analysis to explore the latent structure of these measures. Also assessed the internal reliability of the scale scores.

• Experiences of Traumatic Memories Questionnaire (8 items).

- Measures 1 factor
 - χ2 [df = 20, n = 523] = 66.749, p < .001; CFI = .962, TLI = .947, RMSEA [90 % CI] = .067 [.050,.085], SRMR = .032
- Internal reliability of the scale items was good (ω =.88).

Thinking about the most prominent image or memory, please read each statement below and indicate **how true each is for you**?

Almost never true	Rarely true	Occasionally true	Often true	Almost always true
0	1	2	3	4

When this image or memory of the traumatic event (or events) reoccurs								
 It seems to come out of nowhere. 	0	1	2	3	4			
2. I feel it vividly in my body.	0	1	2	3	4			
3. It seems like time stops.	0	1	2	3	4			
4. I feel like I have travelled back in time to when the event (or events)	0	1	2	3	4			
occurred.								
I feel disconnected from the world around me.	0	1	2	3	4			
6. I feel that I am completely unable to control what is happening to me.	0	1	2	3	4			
7. It replays in my mind like a film or movie.	0	1	2	3	4			
8. I see it happening again but I'm watching myself from the outside.	0	1	2	3	4			

• Trauma Identity Questionnaire (21 items)

- Measures 4 factors: Vulnerable, Inferior, Disconnected from Others, Fragmented.
 - χ2 [df = 183, n = 707] = 616.108, p < .001; CFI = .941, TLI = .933, RMSEA [90 % CI] = .058 [.053,.063], SRMR = .040
- Vulnerable (ω =.86), inferior (ω =.83), disconnected from others (ω =.91), and fragmented (ω =.94).

Instructions: The following statements are about how you typically think and feel about yourself.

Please read each statement and indicate how strongly you agree or disagree with each statement.

(People who answer 4, 5, or 6 to each question can be presented with the follow-up question in the right-hand column.)

1.	I can't stop bad things from	Which of the following statements is most appropriate
	happening.	for you?
	Disagree very strongly	(a) I did not use to feel this way before the
	(2) Disagree strongly	traumatic event but I do now.
	(3) Disagree	(b) I have always felt this way.
	(4) Agree	
	(5) Agree strongly	
	(6) Agree very strongly	
2.	I'm a weak person.	Which of the following statements is most appropriate
	Disagree very strongly	for you?
	(2) Disagree strongly	(a) I did not use to feel this way before the
	(3) Disagree	traumatic event but I do now.
	(4) Agree	(b) I have always felt this way.
	(5) Agree strongly	
	(6) Agree very strongly	

 We were happy that we were able to measure the core theoretical constructs with acceptable levels of reliability and validity.

 Could turn our attention to the proposed relations between the variables in the model.

Figure 3
The Memory and Identity Theory of ICD-11 Complex Posttraumatic Stress Disorder

Trauma Exposure Type of event: Non-interpersonal vs interpersonal, later vs earlier in development, isolated event vs multiple forms of trauma Peri-traumatic reactions: Absence vs presence of tonic immobility, psychic and somatic dissociation, cognitive overload, extreme

Lower Risk

emotions

Higher Risk

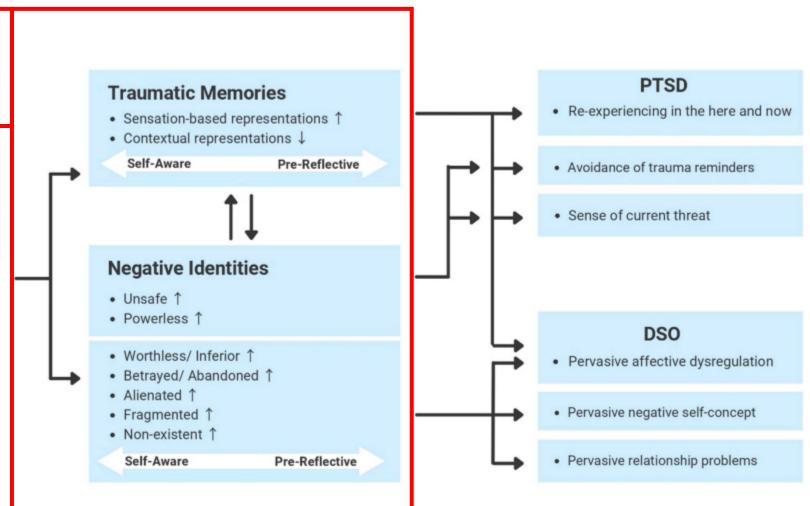


Individual Vulnerability

- Pre-trauma: Absence vs presence of previous psychopathology, previous trauma exposure, other adverse childhood experiences, disrupted attachments, unintegrated pre-reflective experience
- Post-trauma: Absence of social support, presence of loneliness, additional stress, unhelpful coping strategies

Lower Risk

Higher Risk



• Three predictions:

- 1. Interpersonal traumas should be more strongly related to memory & identity problems than non-interpersonal traumas.
- 2. Trauma in **early life** should be more strongly related to memory & identity problems than trauma in later life.
- 3. Exposure to multiple forms of trauma should be more strongly related to memory & identity problems than exposure to a single trauma.

1. Interpersonal traumas should be more strongly related to memory & identity than non-interpersonal.

 Regressed memory & identity latent variables onto 21 traumatic life events.

Only interpersonal events were positively associated with memory & identity processes...

	Trauma memories	Vulnerable	Inferior	Disconnected	Fragmented
Diagnosed with a life-threatening illness	.06	.02	03	02	02
Someone close to you died in an awful manner	.05	.07	.03	.06	.05
Someone close to you had a life-threatening illness or accident	02	.00	.03	.04	.01
Someone threatened your life with a weapon	.03	.04	.05	.07	.06
Physical assault by a parent/guardian	.03	.06	.08	<mark>.08*</mark>	.04
Physical assault by a non-parent/guardian	.01	03	.01	.02	01
Sexual assault by a parent/guardian	.01	.05	.07	.01	.05
Sexual assault by a non-parent/guardian	<mark>.09*</mark>	.04	.01	.05	.03
Sexual harassment (unwanted comments/actions)	.08	<mark>.09*</mark>	.10*	.07	<mark>.09**</mark>
Exposure to war or combat	.02	04	04	01	06
Held captive and/or tortured	04	03	03	05	04
You caused extreme suffering/death to another person	.02	.01	<mark>.10*</mark>	.01	<mark>.08*</mark>
Witnessed extreme suffering or death to another person	.08	.00	05	02	02
Accident where your life was in danger	.04	05	.00	02	03
Natural disaster where your life was in danger	10	.03	.01	01	.02
Human-made disaster where your life was in danger	03	07	06	02	03
Stalked by another person	.05	02	05	.02	.03
Bullied online or offline	05	.02	.04	.04	.01
Humiliated, put down, or insulted by another	.02	<mark>.12**</mark>	.05	.11**	.05
Made to feel unloved, unwelcome, or worthless	<mark>.13*</mark>	.08	<mark>.12*</mark>	.13**	<mark>.14**</mark>
Neglected, ignored, rejected, or isolated	.08	.09	.10	<mark>.11*</mark>	.13**
\mathbb{R}^2	15.1%***	14.4%***	16.6%***	22.8%***	17.9%***

2. Trauma in early life should be more strongly related to memory & identity than trauma in later life.

 Regressed memory & identity latent variables onto total number of traumatic life events in childhood and adulthood.

 Childhood and adulthood traumas were positively associated with memory & identity processes...

	Childhood trauma	Adulthood trauma	Wald χ ²	p
Trauma memories	.18***	.27***	5.73	<mark>.017</mark>
Vulnerable	.23***	.17***	0.01	.931
Vumerable	.23***	.17***	0.01	.931
Inferior	.32***	.11**	6.06	.014
Disconnected from others	.31***	.22***	0.17	.681
Fragmented	.30***	.15***	3.16	.075

3. Exposure to multiple forms of trauma should be more strongly related to memory & identity than exposure to a single form of trauma.

• Regressed memory & identity latent variables onto a categorical variable (0 = single trauma exposure, 1 = multiple trauma exposure).

 Positive values indicate significantly stronger effect for multiple traumatization.

- Multiple traumatization -> trauma memories (β = .16, p < .001)
- Multiple traumatization -> vulnerable (β = .18, p < .001)
- Multiple traumatization -> inferior (β = .17, p < .001)
- Multiple traumatization -> disconnected (β = .24, p < .001)
- Multiple traumatization -> fragmented (β = .16, p < .001)

CPTSD theory testing – conclusion 1

 Memory and identity processes are related to trauma in a manner reasonably consistent with the theoretical predictions.

• The **nature** (interpersonal) and the **number** (multiple) of traumatic events experienced seems to be more important than the developmental timing of the occurrence of traumatic events.

Figure 3
The Memory and Identity Theory of ICD-11 Complex Posttraumatic Stress Disorder

Lower Risk

Higher Risk

Trauma Exposure · Type of event: Non-interpersonal vs interpersonal, **PTSD** later vs earlier in development, isolated event vs **Traumatic Memories** multiple forms of trauma · Re-experiencing in the here and now Sensation-based representations ↑ Contextual representations ↓ · Peri-traumatic reactions: Absence vs presence of tonic immobility, psychic and somatic Self-Aware Pre-Reflective · Avoidance of trauma reminders dissociation, cognitive overload, extreme emotions · Sense of current threat Higher Risk Lower Risk **Negative Identities** • Unsafe 1 Powerless ↑ Individual Vulnerability DSO · Pre-trauma: Absence vs presence of previous Worthless/ Inferior ↑ Pervasive affective dysregulation psychopathology, previous trauma exposure, Betrayed/ Abandoned ↑ other adverse childhood experiences, disrupted Alienated ↑ attachments, unintegrated pre-reflective · Pervasive negative self-concept Fragmented 1 experience Non-existent ↑ · Post-trauma: Absence of social support, presence · Pervasive relationship problems Pre-Reflective Self-Aware of loneliness, additional stress, unhelpful coping strategies

Model makes several predictions:

- 1. Only trauma memories should predict re-experiencing symptoms.
- 2. Vulnerable identity should predict PTSD symptoms.
- 3. Fragmented, inferior, and disconnected identities should predict DSO symptoms.

CPTSD theory testing – Ukraine

	Reexperiencing	speriencing Avoidance	Threat	Emotions	Self-Concept	Relationships
Trauma memories	.69***	.51***	.55***	.54***	.40***	.55***
Vulnerable	03	.17**	.22***	.39***	.25***	.07
Fragmented Self	04	09	09	.06	.06	08
Inferior	06	15*	06	21**	.18**	.09
Disconnected from Others	.10	.19***	.06	.01	06	.25***

CPTSD theory testing – UK

	Re	Av	Th	AD1: Arousal	AD2: Numbing	NSC	DR
Trauma memories	.66***	.57***	.49***	.24***	.37***	.30***	.40***
Vulnerable	.11	.01	.15	.41***	.08	.17	04
Fragmented	.31	.15	.21	.02	.30*	.04	14
Inferior	14	15	26	14	13	.39**	.16
Disconnected from others	22	.10	.10	.14	.12	.00	.58***

CPTSD theory testing – conclusion 2

 Memory and identity processes were related to the CPTSD symptoms in a manner reasonably consistent with the theory.

 Memory problems seem to be central to all symptoms & memory problems may be so important to the PTSD symptoms that the sometimes overwhelm the effect of identity.

CPTSD theory testing – next steps

Two big things to test...

- 1. Do individual vulnerabilities interact with different types of trauma history to influence memory and identity disturbances?
 - Need to develop a 'vulnerability index'.
- 2. Do memory and identity disturbances fully mediate the effect of trauma & individual vulnerabilities on PTSD and DSO symptoms.
 - Need prospective, longitudinal data.

Overall conclusions

 The Memory and Identity Theory provides a theoretical basis to understand the development of PTSD or CPTSD following different forms of trauma.

 The Memory and Identity Theory is an empirically testable model, and initial evidence supports several aspects of the theory – some refinement is probably required.

 Materials needed to test the theory can be found here: https://www.traumameasuresglobal.com/manditheory Thanks for listening.