Complex PTSD and Comorbidity: Theoretical and Empirical Considerations

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Dr Philip Hyland

Maynooth University, Kildare, Ireland

1. A quick introduction to ICD-11 Complex PTSD

What is CPTSD in ICD-11

- Concept of a syndrome representing a complicated form of posttraumatic stress came to prominence with Judith Herman in 1992.

- ICD-10 (1992) - ‘Enduring personality change after catastrophic experience’ (EPCACE).
- DSM-IV (1994) - ‘Disorders of extreme stress not otherwise specified’ (DESNOS).
- Developmental Trauma Disorder (DTD) for children (Ford et al., 2018).

- All slightly different but have in common an emphasis on profound **disturbances in self-organization** resulting from **repeated trauma**.

What is CPTSD in ICD-11

- CPTSD in ICD-11 differs from all previous formulations in several important ways (Brewin, 2020):

1. It requires the core symptoms of PTSD to be present.
2. Diagnosis is based on the symptom profile, not on the type of trauma exposure.
3. The disturbances in self-organization problems are defined by a clear and small set of problems.
4. Functional impairment is explicitly identified as a requirement for the disorder.

What is CPTSD in ICD-11

- Trauma exposure – any extremely threatening or horrific event(s).

PTSD

- **Re-experiencing *in the here and now***
  - Nightmares or flashbacks
- **Avoidance**
  - Internal or external reminders
- **Sense of current threat**
  - Hypervigilance or exaggerated startle
- **Functional impairment**

CPTSD

- **All PTSD requirements, plus…**
- **Pervasive Affective Dysregulation**
  - Hyper- or Hypo-activation
- **Pervasive Negative Self-Concept**
  - Worthless or a failure
- **Pervasive Disturbed Relationships**
  - Withdrawal or avoidance
- **Functional impairment**

Epidemiology of ICD-11 CPTSD

- Several studies have estimated the prevalence of ICD-11 PTSD and CPTSD in nationally representative adult samples.

- USA: PTSD = 3.4% & CPTSD = 3.8% (Cloitre et al., 2019)
- Israel: PTSD = 6.7% & CPTSD = 4.9% (Hyland et al., 2020)
- Ireland: PTSD = 5.0% % & CPTSD = 7.7% (Hyland et al., 2021)

Epidemiology of ICD-11 CPTSD

- We also have figures for clinical/treatment-seeking samples (e.g.):

- UK patients: PTSD = 10.9% & CPTSD = 53.6% (Hyland et al., 2017)
- UK military vets: PTSD = 13.8% & CPTSD = 54.3% (Murphy et al., 2017)
- US military vets: PTSD = 18.1% & CPTSD = 52.8% (Cloitre et al., 2021)

2. Comorbidity – theoretical considerations

ICD-11 & Comorbidity

- One the primary reasons for revising diagnoses in ICD-11 was to reduce comorbidity (see Maercker et al., 2013).

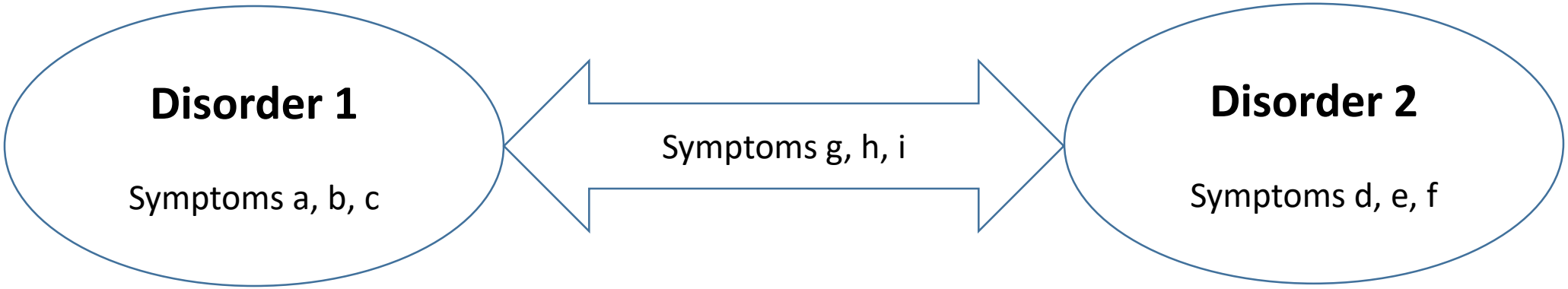
- The basic assumption was that by focusing on **core symptoms** and eliminating symptoms that overlap with other disorders, greater precision would be achieved, and **comorbidity would be reduced**.

Assumptions of Comorbidity

- This approach is reasonable only if you assume that psychiatric disorders are independent entities.
- ***Strong assumption***: psychiatric disorders reflect naturally occurring, distinct constructs – like elements in the periodic table.
- ***Weak assumption***: boundaries between psychiatric disorders are fuzzy but can be meaningfully identified – like species differentiation in zoology (Kendler, 2016; Stein, 2008).

Assumptions of Comorbidity

- Both assumptions allow for disorders to be distinguished from one another and accurate descriptions will achieve this.



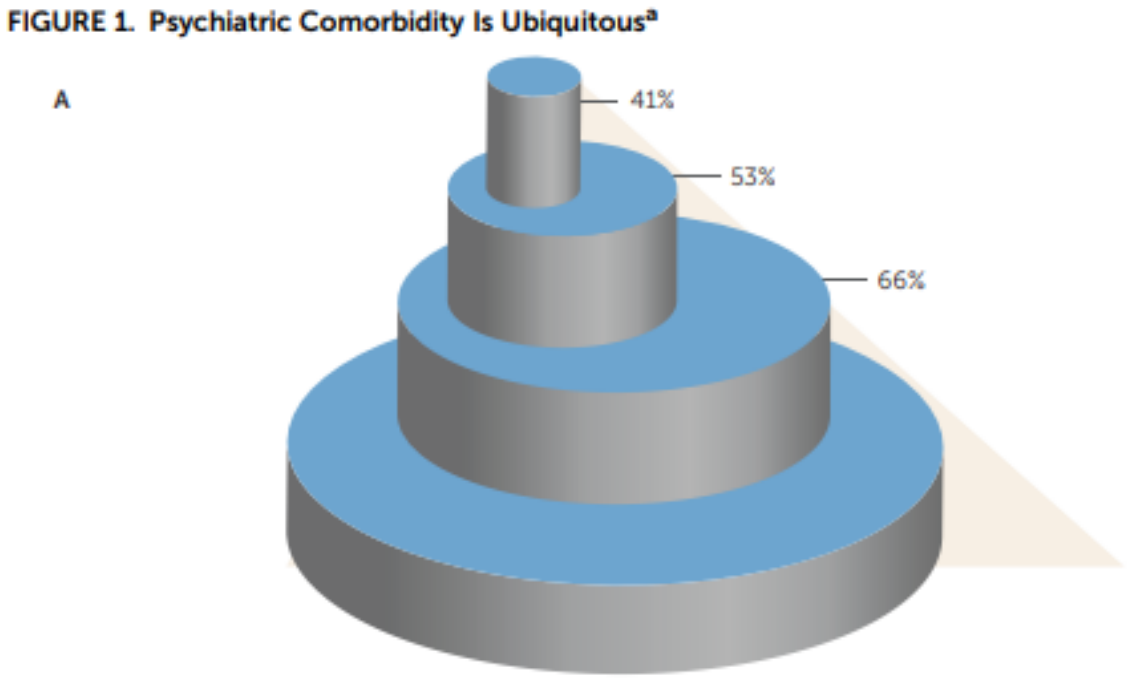
- If symptoms g, h, and i are eliminated, comorbidity would vanish.

Assumptions of Comorbidity

- Standard psychiatric model assumes that all psychiatric disorders are categorically distinct from one another.
- There is a bit of a problem though….
- There is no evidence to support this assumption and a mountain of evidence against it (Caspi et al., 2014).

Assumptions of Comorbidity

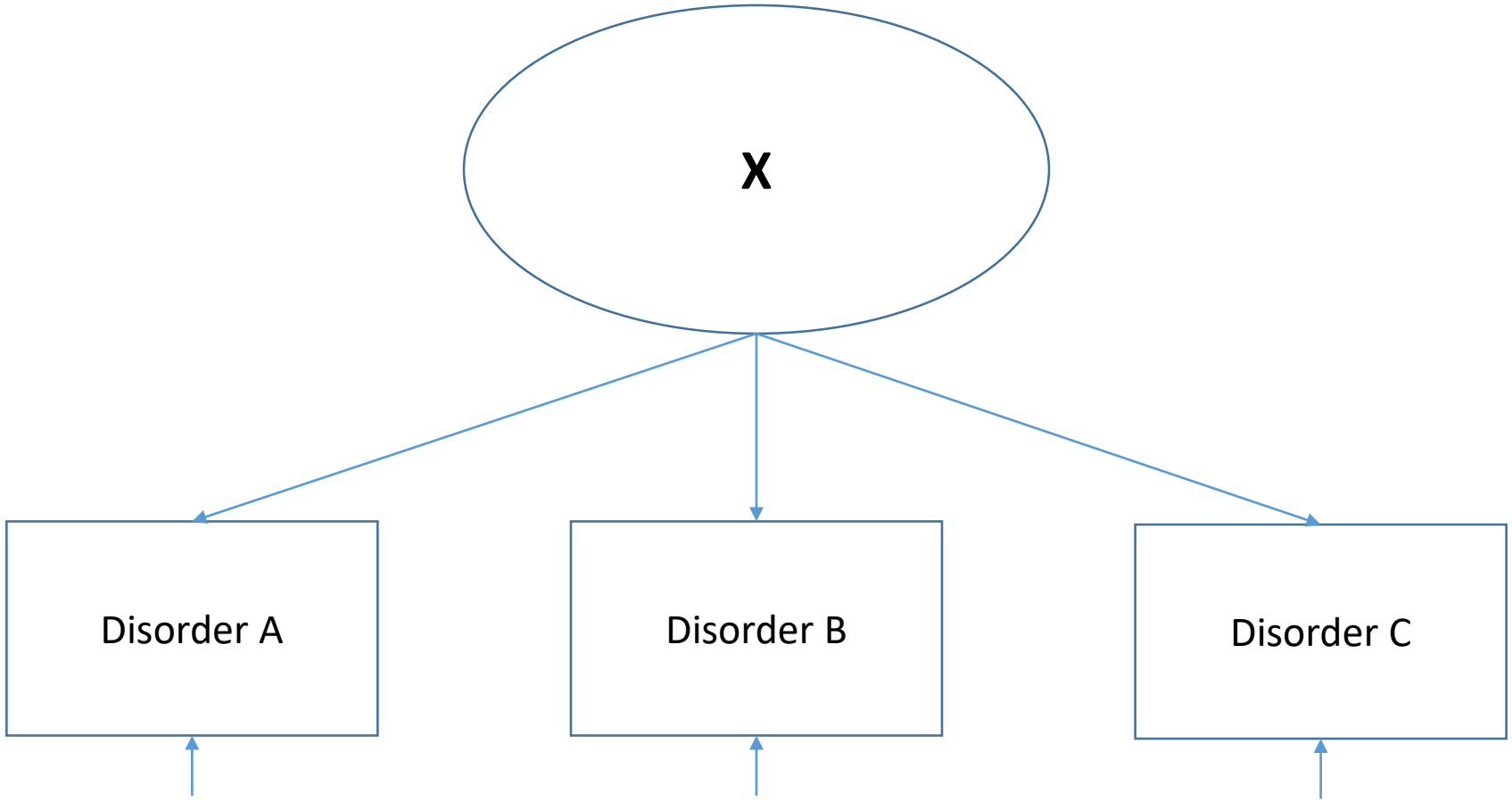
- Most people with one diagnosis will have a second…
- Most people with two will have a third, etc. (Caspi & Moffitt, 2018).
- **Why is comorbidity so common if disorders are discrete?**



Alternative perspective on comorbidity

- Psychological scientists now think about psychopathology as a dimensional construct.
- From a dimensional perspective, comorbidity between disorders is easy to understand.
- Disorders co-occur because they share an underlying cause…

Alternative perspective on comorbidity



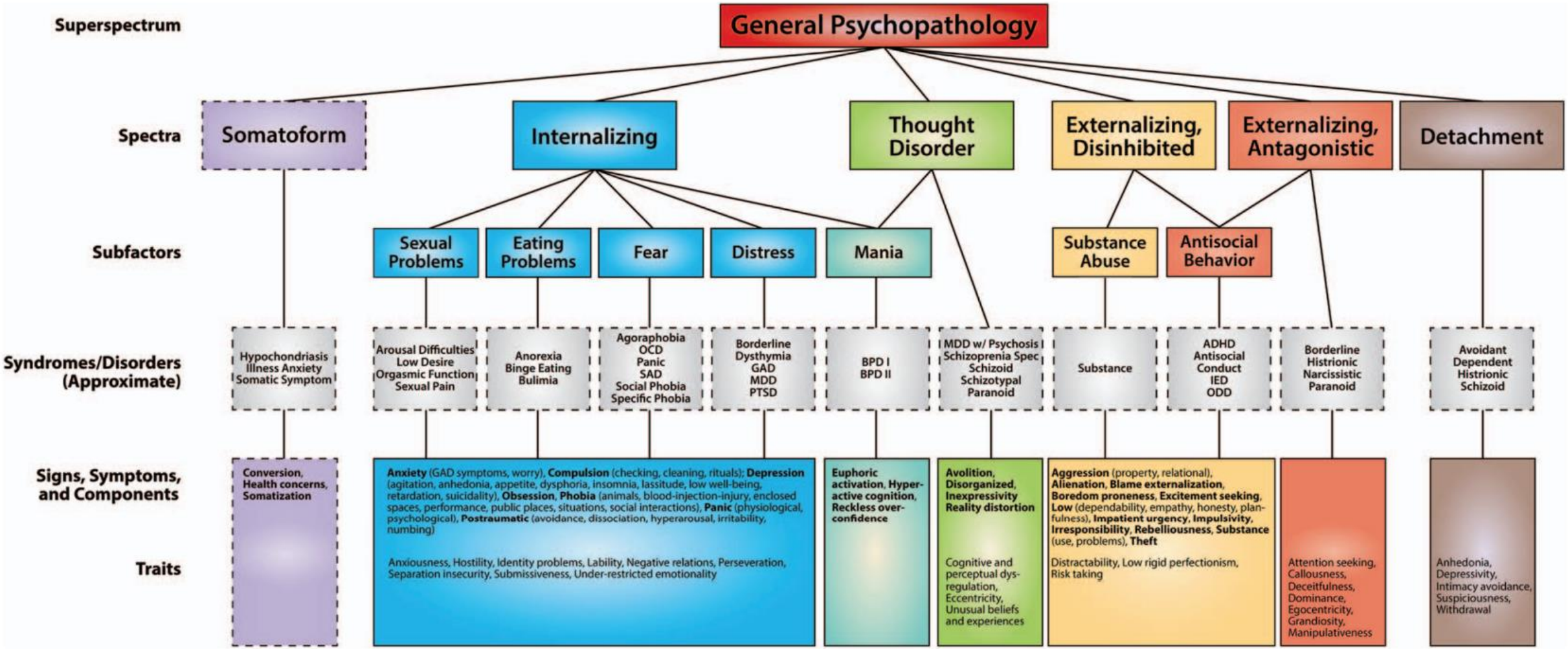
Alternative perspective on comorbidity

- In statistical terms, this is an ‘effect indicator model’ (Bollen & Lennox, 1991) – the latent variable has downward causal effects.
- The higher one scores on the latent variable, the more likely one is to have higher scores on all the observed indicators (i.e., disorders).
- From a dimensional perspective, comorbidity is the rule not the exception.
- **Comorbidity cannot be eliminated** – it is a naturally occurring phenomenon.

Alternative perspective on comorbidity

- **One more crucial point** - error in measurement reduces the correlation between observed variables.
- The more precisely (reliably) you measure indicator variables, the stronger the correlation will be.
- If you increase the precision of the measurement of PTSD - say, by removing non-specific symptoms - you won't reduce comorbidity, you will increase it.
- Quite the problem for the ICD-11.

Hierarchical Taxonomy of Psychopathology



3. What we know about CPTSD comorbidity

CPTSD comorbidity

Contents lists available at ScienceDirect

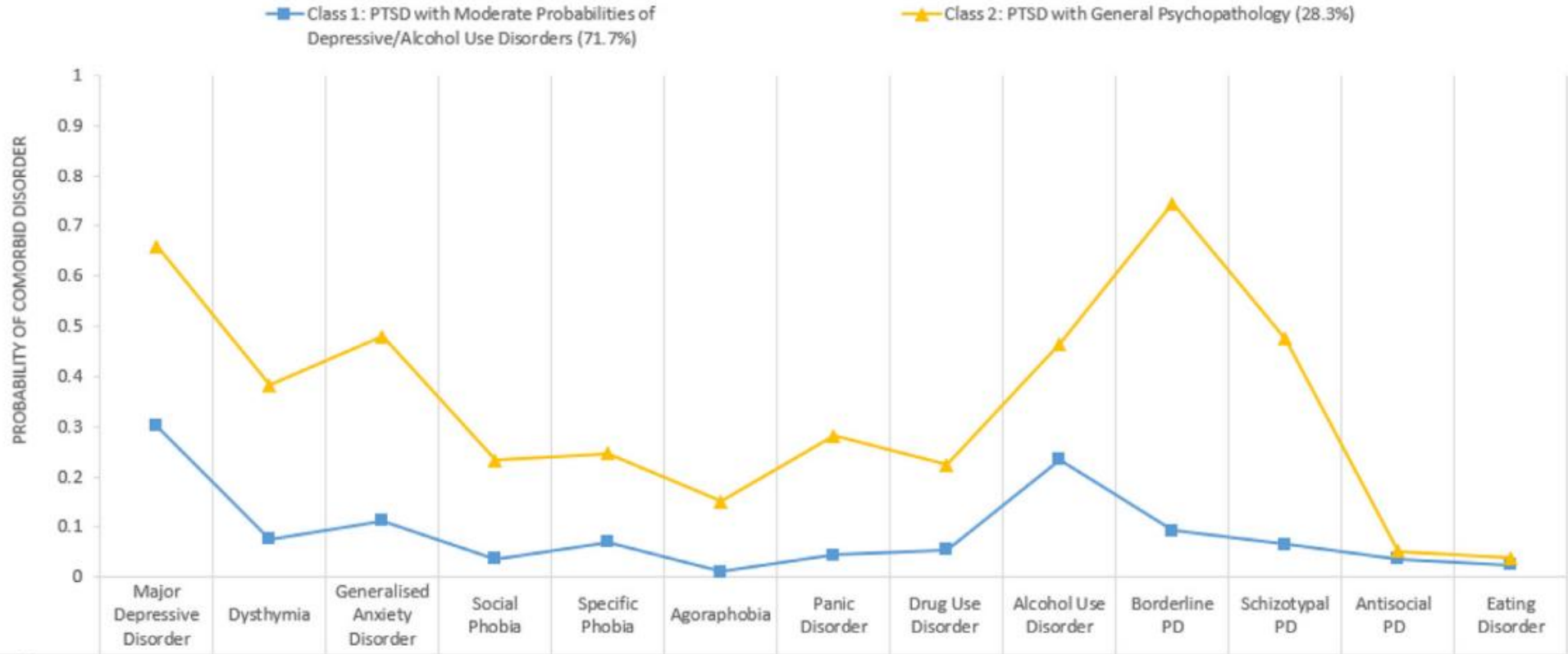
Psychiatry Research

journal homepage: www.elsevier.com/locate/psychres

Patterns of comorbidity associated with *ICD-11* PTSD among older adults in the United States

Robert Fox[a,*], Philip Hyland[a], Joanna McHugh Power[a,b], Andrew N. Coogan[a]

- Used the NESARC-III dataset – nationally representative sample of 36,309 US adults.
- Selected those participants aged 60 and older who met criteria for ICD-11 PTSD (or CPTSD) (n = 530).
- We used latent class analysis to model patterns of comorbidity with 13 other psychiatric disorders.

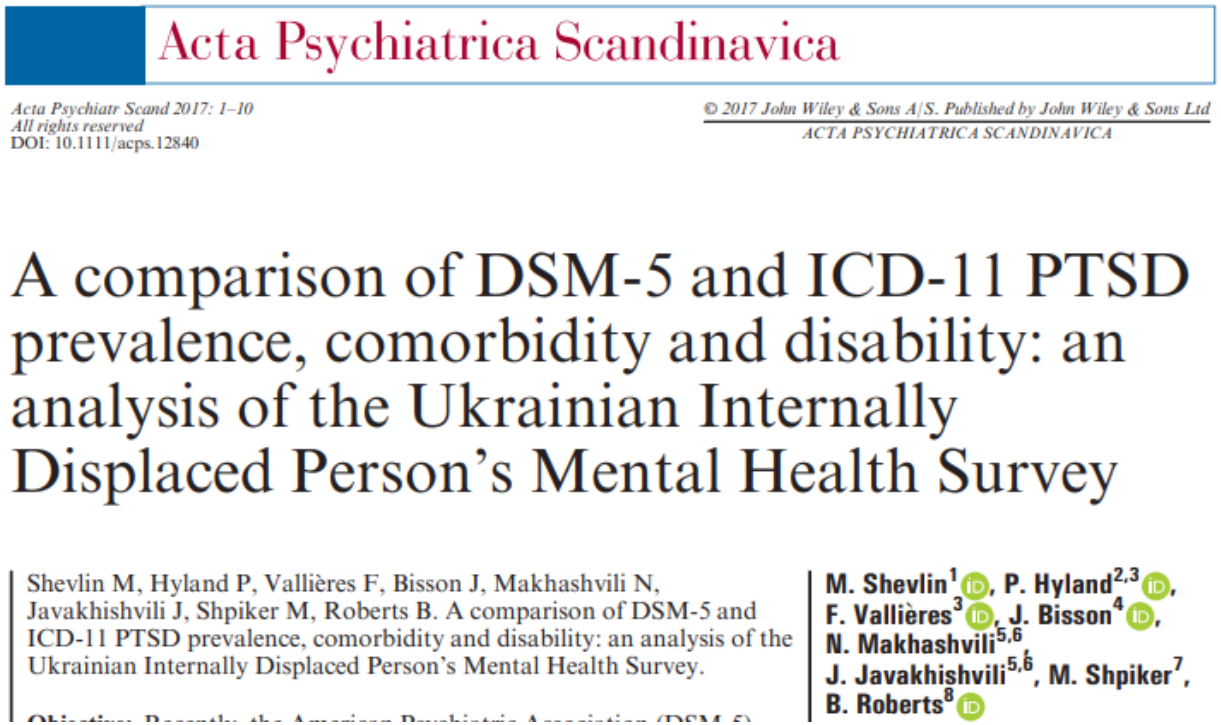


	Major Depressive Disorder	Dysthymia	Generalised Anxiety Disorder	Social Phobia	Specific Phobia	Agoraphobia	Panic Disorder	Drug Use Disorder	Alcohol Use Disorder	Borderline PD	Schizotypal PD	Antisocial PD	Eating Disorder
Class 1: PTSD with Moderate Probabilities of Depressive/Alcohol Use Disorders (71.7%)	.301	.076	.113	.037	.069	.010	.044	.055	.234	.092	.065	.036	.024
Class 2: PTSD with General Psychopathology (28.3%)	.660	.382	.479	.233	.246	.150	.281	.223	.465	.744	.475	.052	.038

- No group identified without comorbidity.
- Elevated probabilities of comorbidity with other ‘Distress’ disorders (MDD, GAD, Borderline) – within-dimension comorbidity
- Elevated probabilities of across-dimension comorbidity (AUD, Schizotypal PD)

CPTSD comorbidity

- Examined DSM-5 PTSD and ICD-11 PTSD/CPTSD comorbidity and disability among Ukrainian IDPs.
- Representative sample of Ukrainian IDPs (N = 2203).
- Assessed…
  - DSM-5 PTSD (PCL-5)
  - ICD-11 PTSD/CPTSD (ITQ)
  - Depression (PHQ-9)
  - Generalized anxiety (GAD-7)
  - Disability (WHODAS 2.0)



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A comparison of DSM-5 and ICD-11 PTSD prevalence, comorbidity and disability: an analysis of the Ukrainian Internally Displaced Person's Mental Health Survey

Shevlin M, Hyland P, Vallières F, Bisson J, Makhashvili N, Javakhishvili J, Shpiker M, Roberts B. A comparison of DSM-5 and ICD-11 PTSD prevalence, comorbidity and disability: an analysis of the Ukrainian Internally Displaced Person's Mental Health Survey.

M. Shevlin[1], P. Hyland[2,3], F. Vallières[3], J. Bisson[4], N. Makhashvili[5,6], J. Javakhishvili[5,6], M. Shpiker[7], B. Roberts[8]

CPTSD comorbidity

- DSM-5 PTSD = 27.4% (95% CI = 25.5, 29.3%)
- ICD-11 PTSD/CPTSD = 21.0% (95% CI = 19.2, 22.7%)

- DSM-5 PTSD: 48.5% had ‘clinically significant’ levels of disability.
- ICD-11 C/PTSD: 57.6% had ‘clinically significant’ levels of disability.

- ICD-11 PTSD/CPTSD reflects a more ‘debilitating’ diagnosis than DSM-5 PTSD.

- ***Comorbidity rates were higher for ICD-11 PTSD/CPTSD than DSM-5 PTSD***…

CPTSD comorbidity

Table 2. Comorbidity of DSM-5 and ICD-11 PTSD with generalized anxiety disorder

PTSD diagnosis	% with GAD	% with MDD	% with GAD and MDD
Comorbidity rates for ICD-11 and DSM-5 PTSD			
ICD-11	54.6%	64.3%	43.2%
DSM-5	46.7%	57.7%	35.0%
Difference	7.9%*	6.5%*	8.1%*
Comorbidity rates for 'unique' cases of ICD-11 and DSM-5 PTSD			
Unique ICD-11	29.3%	34.6%	22.8%
Unique DSM-5	25.5%	36.6%	15.9%
Difference	3.8%*	2.0%*	6.9%*

GAD, generalised anxiety disorder; MDD, major depressive disorder.
*All differences are statistically significant ($P < 0.05$).

- Consistent with the predictions of a dimensional perspective of psychopathology.
- Nearly half of those with ICD-11 PTSD/CPTSD had MDD *and* GAD.

CPTSD comorbidity

Risk factors and comorbidity of ICD-11 PTSD and complex PTSD: Findings from a trauma-exposed population based sample of adults in the United Kingdom

Thanos Karatzias[1,2] | Philip Hyland[3,4] | Aoife Bradley[1] | Marylène Cloitre[5,6] | Neil P. Roberts[7,8] | Jonathan I. Bisson[8] | Mark Shevlin[9]

- Assessed…
  - Depression (PHQ-9)
  - Generalized Anxiety (GAD-7)
  - Alcohol Use Disorder (AUDIT-C)
  - Self-harm/suicide
  - Chronic illness (Charlson Comorbidity Index)

- **ICD-11 PTSD = 5.3%**
- **ICD-11 CPTSD = 12.9%**

- High rates of comorbidity associated with ICD-11 CPTSD (and PTSD)

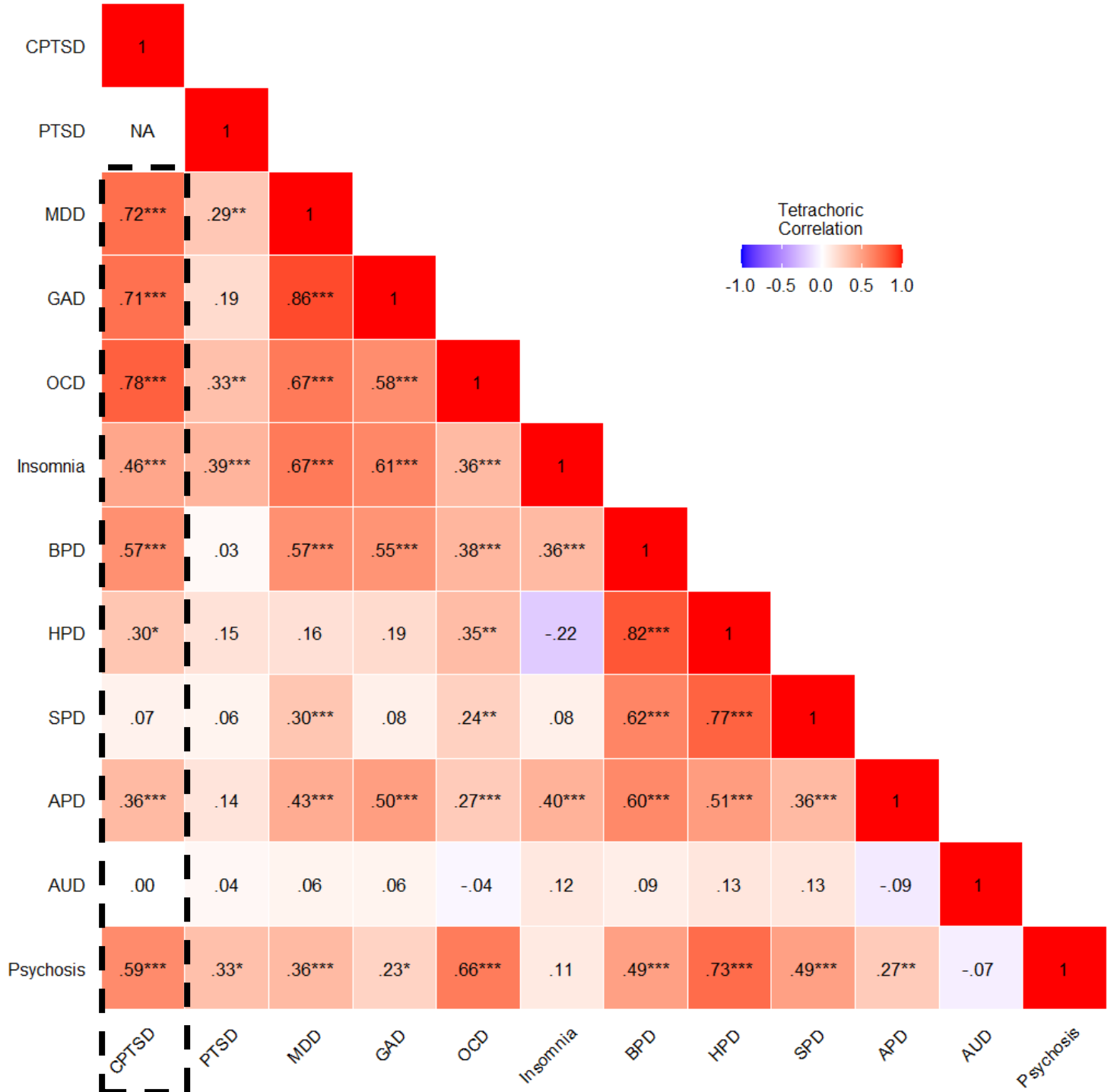
TABLE 3 Proportion of those with PTSD and CPTSD meeting probable diagnosis for other disorders

	% with MDD	% with GAD	% with AUD	% with suicidality	% with chronic illness
	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
PTSD	48.2	30.4	60.0	57.1	44.6
	1.79 (1.04–3.07)*	1.10 (0.61–1.97)	2.04 (1.02–4.08)*	3.13 (1.81–5.41)***	1.90 (1.10–3.27)*
CPTSD	89.0	86.0	58.8	56.6	45.6
	21.82 (12.51–38.04)***	24.63 (14.77–41.07)***	2.07 (1.36–3.15)**	3.43 (2.37–4.70)***	2.11 (1.46–3.05)***

CPTSD comorbidity

- One last piece of data to show you.
- Findings from a recent nationally representative survey of adults in Ireland (N = 1,100)
- Assessed 12 different mental health disorders by means of self-report measures - set very strict criteria for meeting diagnostic threshold.

CPTSD comorbidity



4. Key takeaway messages

Conclusions

- ICD-11 CPTSD is relatively common in the general population (4-8%), and very common in treatment seeking persons (~ 50%).
- ICD-11 CPTSD is a disorder associated with high levels of distress and disability.
- Comorbidity is very common among those with ICD-11 CPTSD.

Conclusions

- ‘Internalizing’ disorders likely to commonly co-occur with ICD-11 CPTSD include:
  - Major Depression
  - Generalized Anxiety Disorder
  - Obsessive-Compulsive Disorder
  - Insomnia Disorder
  - Borderline Personality Disorder
- Thought Disorder and Externalizing Disorders are also likely to co-occur with ICD-11 CPTSD but potentially at lower levels:
  - Alcohol Use Disorder
  - Psychosis
  - Histrionic Personality Disorder
- Given how severe a condition ICD-11 CPTSD is, multiple comorbidities are expected.

Conclusions

- Finally, a substantial proportion of people with ICD-11 CPTSD exhibit suicidal tendencies.

- In our Irish study we found that among those with CPTSD:
  - 62% had a history of suicidal ideation (OR = 4.9)
  - 45% had a history of self-harming behaviour (OR = 7.6)
  - 40% had a history of attempted suicide (OR = 7.2)

- Suicide is likely to be an issue for many people suffering from Complex PTSD.

THANK YOU!