Exploring transdiagnostic trauma-related symptoms across the world: a latent class analysis

BACKGROUND

Do trauma-related symptoms and risk patterns differ across the world?

METHOD

- N = 8675 individuals from 115 countries across 6 world regions
- Global Psychotrauma Screen

Estimated probabilities of endorsement for the 3-class-solution | Fig. 1

- High symptom class (33%) - Moderate symptom class (42%) - Low symptom class (25%)



- 7 latent class analyses (LCAs) \rightarrow 1 per region + 1 joint LCA
- Multinomial logistic regression (MLR)

RESULTS

- Similar class compositions across regions
- Full-sample LCA identified:
- no qualitatively different classes
- three classes based on symptom severity lacksquare
- MLR revealed several risk factors for membership in the high symptom class

Predictors of class membership | Tab. 2

Demographics and risk factors Tab. 1				High vs. low (ref)	High vs. moderate (ref)	Moderate vs. low (ref)	
Variables		N = 8675		OR p	OR p	OR p	
Age	mean (SD), years	38.1 (14.1)	Gender: Women ^a	1.63 < 0.001	1.05 0.508	1.55 <0.001	
Gender	Men	2077 (23.9%)	Gender: Nonbinary ^b	3.34 0.011	1.93 0.018	1.73 0.233	
	Women	6506 (75.0%)	Age	0.98 < 0.001	0.98 <0.001	0.99 0.003	
			African States ^c	1.11 0.533	1.31 0.025	0.85 0.260	

	Nonbinary	92 (1.1%)		
UN region	African States	293 (3.4%)		
	Asia-Pacific States	1733 (20.0%)		
	Eastern European States	1575 (18.2%)		
	Latin American and Caribbean States	956 (11.0%)		
	Western European and Other States	2631 (30.3%)		
	North America	1487 (17.1%)		
Risk factors	Other stressful events	5544 (63.9%)		
	Lack of social support	3749 (43.2%)		
	Childhood trauma	4728 (54.5%)		
	History of mental illness	3282 (37.8%)		
	Lack of resilience	1824 (21.0%)		
Risk factors	North America Other stressful events Lack of social support Childhood trauma History of mental illness	1487 (17.1%) 5544 (63.9%) 3749 (43.2%) 4728 (54.5%) 3282 (37.8%)		

AIRCan States		0.555	1.31	0.025	0.05	0.200	
Asia-Pacific States ^c	0.71	0.000	0.85	0.017	0.84	0.011	
Eastern European States ^c	0.80	0.011	0.89	0.069	0.91	0.166	
Latin American and Caribbean States ^c	1.23	0.043	0.98	0.841	1.25	0.009	
Western European and Other States ^c	0.92	0.249	0.99	0.876	0.93	0.213	
North America ^c	1.38	0.001	1.03	0.616	1.34	0.002	
PTSD criterion A1 ^d	1.31	0.002	1.17	0.020	1.12	0.096	
Multiple experiences of index event ^e	4.89	<0.001	2.15	<0.001	2.27	<0.001	
Index event happened in the past year ^f	1.85	<0.001	1.05	0.471	1.77	<0.001	
Other stressful events ^g	7.52	<0.001	2.24	<0.001	3.35	<0.001	
Lack of social support	6.52	<0.001	2.41	<0.001	2.71	<0.001	
Childhood trauma ^g	2.27	<0.001	1.65	<0.001	1.37	<0.001	
History of mental illness ^g	4.06	<0.001	2.35	<0.001	1.73	<0.001	
Lack of resilience ^g	1.93	<0.001	1.73	<0.001	1.11	0.192	

^a0: man, 1: woman; ^b0: man,1: nonbinary; ^cCoding for UN region: deviation from unweighted grand mean; ^d0: PTSD criterion A not fulfilled, 1: PTSD criterion A fulfilled; ^e0: index event was single event, 1: index event happened multiple times; ^f0: index event happened more than a year ago, 1: index event happened in the past year; ^g0: risk factor not present, 1: risk factor present. Bolded values indicate a p-value <.005

DISCUSSION

- Trauma-related responses seem to be similarly transdiagnostic across the world
- Symptom severity appears to differ
- Factor mixture models might further elucidate our understanding of patterns of transdiagnostic

Class membership by region | Fig. 2

High symptoms

Low symptoms

North America



trauma-related symptoms

Possible areas of intervention include ongoing stressors and lack of social support

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Paper in a Day Project



proportion of participants





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