

Hierarchical Structure of Posttraumatic Cognitions and Complex PTSD Symptoms in Survivors of IPV

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Introduction

- There is a strong association between posttraumatic cognitions and personality traits.
- Research on this has focused on the relative associations between traits and different models of cognitions.
- However, there are similarities between traits and cognitions that suggest they may share an underlying structure.
- Identifying this underlying structure may be useful to streamline the assessment and treatment of posttraumatic distress, especially complex PTSD (CPTSD).
- CPTSD is especially common in survivors of intimate partner violence (IPV).
- However, there is little research on the conjoint structure of posttraumatic cognitions and personality traits and its relation to CPTSD in the aftermath of IPV.

Method

- Participants were 191 IPV-exposed women recruited online (age_{mean} = 32.13; SD = 8.11).
- Majority were White (87%), cisgender (96%), and college-educated (54%).
- Measures:
 - CPTSD: International Trauma Questionnaire
 - IPV: Severity of Violence Against Women Scales
 - Other Trauma: Life Events Checklist
 - Personality: Personality Inventory for DSM-5
 - <u>Cognitions</u>: Trauma-Related Cognitions Scale, Trauma and Attachment Belief Scale, Posttraumatic Cognitions Inventory, Trauma Appraisals Questionnaire

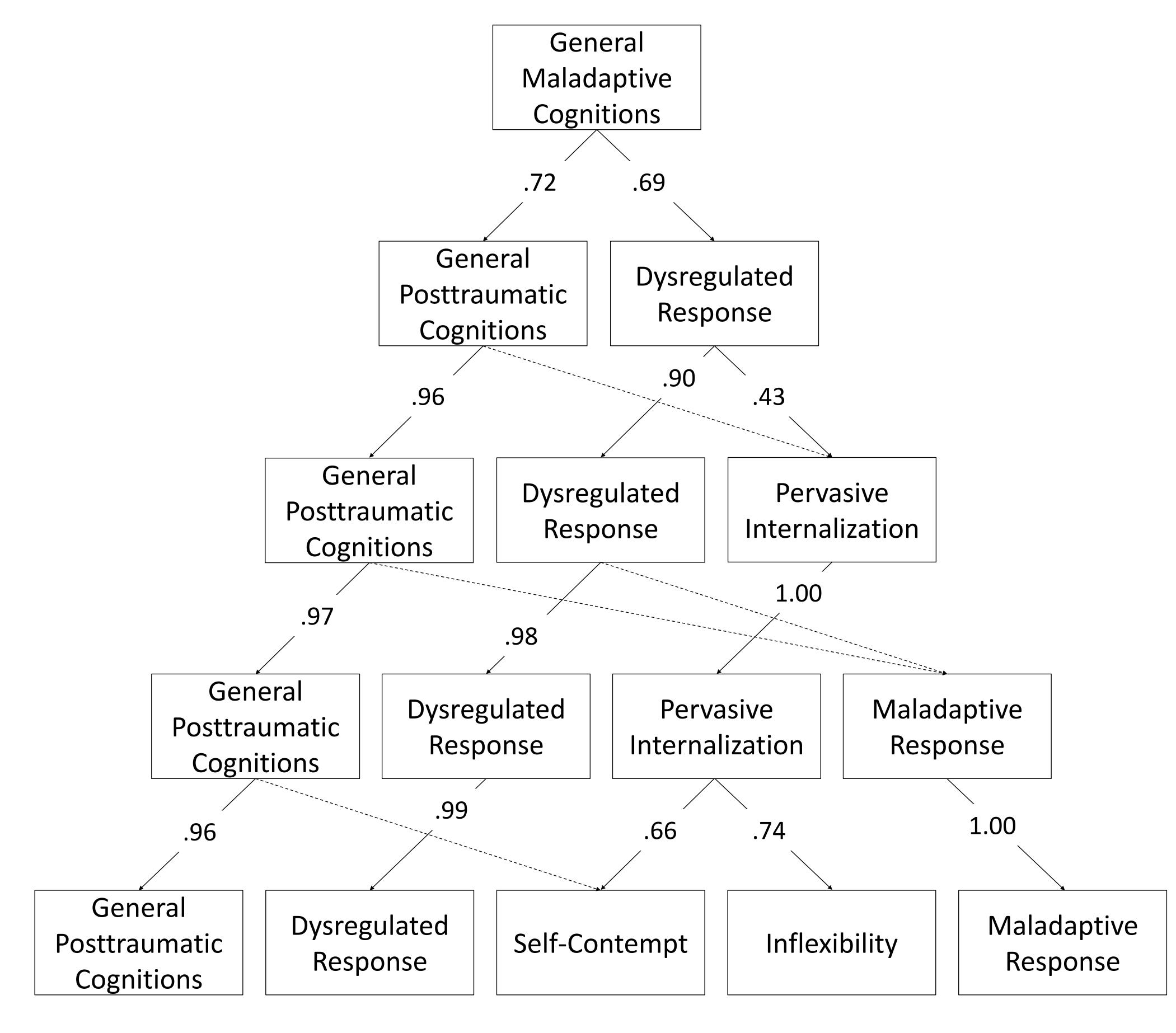
Data Analysis & Results

- We examined the structure of traits and cognitions using hierarchical principal components analysis by entering 19 subscales of cognitions and 5 subscales of traits.
- Analysis yielded an 8-echelon structure in which traits were primarily associated with Dysregulated and Maladaptive Responses (see Figure 1 for abbreviated results).
- We entered each echelon of the hierarchy, along with IPV severity and other trauma, into a series of Bayesian regression models predicting CPTSD symptoms.
- Across all models, all echelons predicted CPTSD symptoms over and above other trauma, while IPV severity was consistently not a credible predictor.
- Analysis of ELPD suggested that the model with 4-echelon predictors was the most probable to predict CPTSD symptoms (see Table 1).

Discussion

- Findings suggest that posttraumatic cognitions have an underlying structure, with some dimensions being more trait-like than others.
- This suggests the utility of measuring both posttraumatic cognitions and maladaptive traits in the assessment of women exposed to IPV.
- Although the assessment of posttraumatic cognitions is already common in the treatment of posttraumatic distress, the assessment of personality is not.
- Study findings thus support the inclusion of personality assessment in general (and the assessment of maladaptive traits in particular) in trauma-focused clinical work.

Figure 1. Top Five Echelons of the Structural Hierarchy of Traits and Cognitions.



Note. Dashed lines indicated modest ($r \le .40$) but statistically significant (p < .05) paths; table of factor loadings can be accessed using the QR code.

Table 1. Incremental Effects of Echelon 4 Factors, IPV severity, and Other Traumatic Events on CPTSD Symptoms.

	β	95% HDI	R^2
IPV Severity	.00	[17, .17]	.60*
Other Trauma	.32*	[.18, .46]	
General Posttraumatic Cognitions	.34*	[.24, .44]	
Dysregulated Response	.16*	[.01, .30]	
Pervasive Internalization	.29*	[.19, .39]	
Maladaptive Response	.30*	[.20, .39]	

Note. * indicates that 0 did not fall within 95% of highest density interval (HDI).

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 Table 2. Eigenvalues and Factor Loadings for Top Five Echelons of the Structural Hierarchy of Maladaptive Personality Traits and Posttraumatic Cognitions.

Echelon	1 2		3		4			5							
	GMP	GEN	DYS	GEN	DYS	PER	GEN	DYS	PER	MAL	GEN	DYS	SEL	INF	MAL
Eigenvalue	14.56	14.56	1.79	14.56	1.79	1.28	14.56	1.79	1.28	1.18	14.56	1.79	1.28	1.18	.74
% of variance	60.66	60.66	7.44	60.66	7.44	5.34	60.66	7.44	5.34	4.50	60.66	7.44	5.34	4.50	3.17
Posttraumatic Cognitions															
Assimilation	.61	.32	.54	.11	.22	.82	.06	.22	.81	.19	.06	.20	.31	.83	.19
Overaccommodation	.85	.51	.70	.39	.50	.63	.40	.50	.61	.13	.40	.47	.31	.60	.14
Safety (Self)	.82	.56	.60	.56	.57	.26	.62	.57	.25	.02	.59	.56	.33	.10	.01
Safety (Other)	.83	.40	.78	.36	.72	.37	.43	.73	.35	.01	.46	.70	.18	.34	.01
Trust (Other)	.79	.75	.36	.78	.39	.12	.79	.34	.13	.16	.80	.29	.19	.11	.18
Esteem (Self)	.83	.67	.51	.70	.54	.15	.74	.51	.14	.08	.74	.48	.24	.06	.08
Esteem (Other)	.75	.79	.25	.82	.27	.12	.84	.23	.12	.12	.80	.20	.29	.02	.13
Intimacy (Other)	.74	.83	.20	.83	.18	.19	.79	.10	.20	.29	.76	.06	.26	.17	.31
Control (Self)	.84	.70	.49	.64	.38	.42	.63	.35	.42	.19	.67	.28	.18	.50	.21
Control (Other)	.82	.51	.66	.46	.56	.42	.51	.56	.40	.03	.56	.51	.14	.48	.04
Negative Cognitions of Self	.94	.70	.63	.64	.52	.47	.65	.49	.46	.18	.61	.47	.41	.32	.18
Negative Cognitions of World	.77	.84	.24	.74	.08	.49	.69	.02	.50	.26	.61	.00	.47	.36	.27
Negative Cognitions - Self-Blame	.76	.36	.72	.20	.47	.72	.22	.49	.70	.05	.16	.52	.52	.48	.02
Shame	.83	.66	.51	.51	.28	.66	.49	.26	.66	.20	.34	.30	.72	.29	.17
Betrayal	.68	.73	.22	.61	.03	.54	.54	03	.55	.29	.38	.02	.70	.19	.27
Self-Blame	.82	.48	.68	.35	.46	.65	.38	.48	.63	.05	.27	.53	.65	.29	.02
Fear	.88	.73	.51	.67	.41	.43	.66	.37	.43	.20	.55	.39	.59	.12	.18
Alienation	.84	.84	.33	.76	.20	.45	.71	.13	.46	.34	.60	.14	.57	.21	.33
Anger	.84	.53	.66	.46	.54	.46	.46	.52	.45	.19	.39	.54	.49	.20	.17
Personality Traits															
Antagonism	.62	.02	.88	.03	.88	.22	.06	.87	.18	.17	.09	.88	.10	.12	.15
Detachment	.69	.45	.53	.49	.59	.08	.40	.46	.06	.60	.38	.46	.16	.00	.60
Disinhibition	.71	.23	.78	.23	.76	.25	.17	.68	.23	.48	.18	.69	.13	.19	.47
Negative Affect	.55	.43	.35	.41	.30	.23	.23	.14	.23	.80	.19	.15	.19	.18	.80
Psychoticism	.76	.32	.78	.31	.75	.27	.27	.68	.24	.44	.27	.68	.18	.18	.43

Note. Loadings ≥ .40 in **boldface** font; Neg Cog = negative cognitions; GMP = general maladaptive posttraumatic cognitions; GEN = general posttraumatic cognitions; DYS = dysregulated response; PER = pervasive internalization; MAL = maladaptive response; INF = inflexibility.