

# Psychometric Evaluation of the Dutch International Trauma Questionnaire for ICD-11 PTSD and Complex PTSD

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## INTRODUCTION

The International Trauma Questionnaire<sup>1</sup> (ITQ) is a self-report measure to assess the severity and probable posttraumatic stress disorder (PTSD) and complex PTSD (CPTSD) as defined in the 11th revision of the *International Classification of Diseases* (ICD-11; Table 1.). Few studies have examined the psychometric properties of the full- and short-length ITQ in depth<sup>1, 2, 3</sup>. Therefore, we aimed to psychometrically evaluate the Dutch-translated 28-item and 12-item ITQ version.

## STUDY AIMS

- Assess the internal consistency of the total, PTSD and Disturbances in Self-Organization (DSO) scales (see Table 1) of the 28-item and 12-item ITQ using Cronbach's alpha coefficients, inter-item correlations and corrected item-total correlations;
- Assess the convergent and discriminant validity using Pearsons' correlations with similar and dissimilar though related comparison measures (see Table 1);
- Assess the factorial validity using confirmatory factor analysis (CFA) for four alternative models described in the literature<sup>3</sup>;
- Evaluate differences in rates of probable PTSD and CPTSD between both ITQ versions.

## METHOD

**Participants:** Data came from existing clinical studies and routine clinical assessments for the 28-item (N = 956) and 12-item (N = 4944) ITQ versions in treatment seeking individuals with heterogeneous trauma-backgrounds. Sub-samples were combined from in- and out-patient clinics in the Netherlands, see Table 2.

Table 1. PTSD and CPTSD clusters according to the ICD-11 with respective comparison measures in current study

PTSD	CPTSD	Comparison Measures Subscales
Re-experiencing = RE		CAPS-5 <i>Intrusion</i>
Avoidance = AV		CAPS-5 <i>Avoidance</i>
Sense of current Threat = SoT		CAPS-5 <i>Hyperarousal</i>
Disturbed Self-Organisation = DSO	Affect dysregulation = AD	Difficulties in Emotion Regulation Scale <i>Impulse control difficulties</i>
	Negative self-concept = NSC	Posttraumatic Cognitions Inventory <i>Negative beliefs about the self</i>
	Disturbed relationships = DR	Inventory of Interpersonal Problems <i>Cold</i>

Table 2. Sample characteristics and ICD-11 rates of probable PTSD and CPTSD

Sample characteristics		ITQ-12		ITQ-28	
Sub-samples	Sample (n)	PTSD (n, %)	CPTSD (n, %)	PTSD (n, %)	CPTSD (n, %)
1 ARQ Centrum'45	678	167, 24.9%	297, 44.3%	270, 40.2%	232, 34.6%
2 PSYTREC	3988	785, 19.7%	2486, 62.3%	-	-
3 PsyQ	150	30, 20%	80, 53.3%	59, 39.3%	59, 39.3%
4 Dimence and GGZ Oost Brabant	128	21, 20.4%	57, 55.3%	42, 40.4%	45, 43.3%
<b>Patients with data for both ITQ's</b>	<b>956</b>	<b>218, 23.6%</b>	<b>434, 47%</b>	<b>371, 40,1%</b>	<b>336, 36,3%</b>

## RESULTS

### Internal consistency

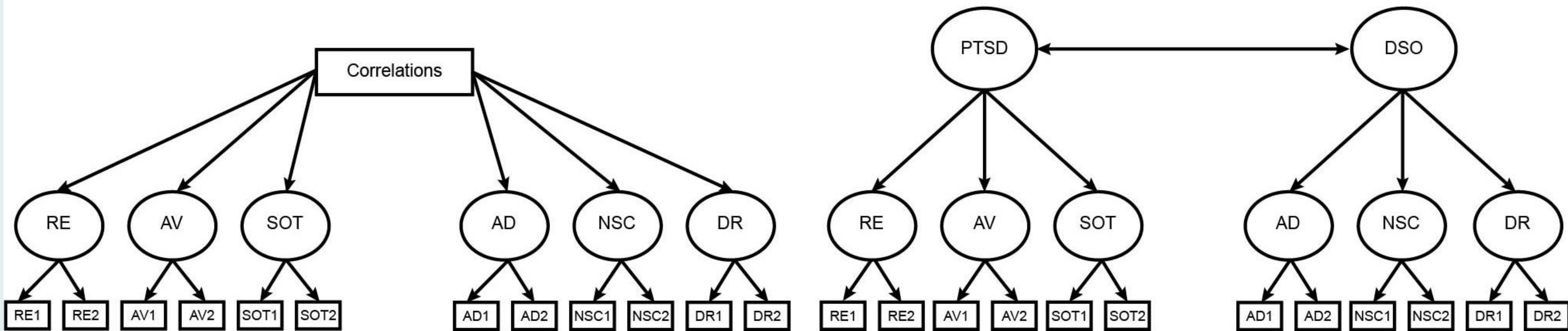
- For both ITQ's:
- Cronbach's Alpha's for the total, PTSD and DSO scales were good ( $\alpha = \geq .76$ ).
  - Most inter-item correlations for the total, PTSD and DSO scales were within recommended range of .15-.50 (Clark & Watson, 1995).
  - Generally, corrected item-total correlations were high (on average  $\geq .50$ ); i.e. higher scores on individual items corresponded to higher scores on the total and subscales.

### Convergent and discriminant validity

- For both ITQ's:
- Correlations between ITQ subscales and similar comparison measures subscales were higher than correlations with dissimilar though related comparison measures subscales.

### Confirmatory Factor Analysis Results

Figure 1 shows the two best fitting solutions of the latent structure of ICD-11 PTSD and CPTSD; **Correlated 1st-order 6-factor CPTSD model (left)** and **2-factor 2nd-order with 3 1st-order factors (right)**. Comparison across model fit indices indicated the former/left model as the optimal, most parsimonious model for the 12-item ITQ (Comparative Fit Index = .997; Tucker-Lewis Index = .995, lowest Root Mean Square Error Approximation value (RMSEA) = .027), but the two best fitting models did not differ >.015 in terms of fit ( $\Delta$  RMSEA = .005), suggesting they are equivalent. CFA for the 28-item ITQ showed sub-threshold model fit indices with the same pattern of results.



## CONCLUSION

- Internal consistency and convergent validity were supported for the full- and short-length Dutch version of the ITQ in a large clinical sample with heterogeneous trauma-background. Factor validity was good for the ITQ-12 and acceptable for the ITQ-28.
- Present results support the use of the ITQ as an instrument to assess the symptom severity of ICD-11 PTSD and CPTSD.
- The discrepancy in CPTSD rates for the short and full-length ITQ calls for further testing of scoring methods against diagnostic clinical interviews.