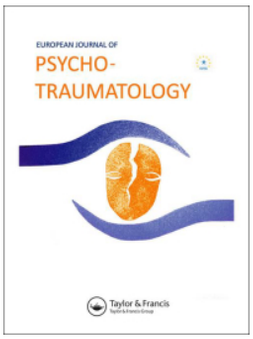

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BASIC RESEARCH ARTICLE

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The International Trauma Interview (ITI): development of a semi-structured diagnostic interview and evaluation in a UK sample

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ABSTRACT

Background: The International Trauma Interview (ITI) is a structured clinician-administered measure developed to assess posttraumatic stress disorder (PTSD) and complex PTSD (CPTSD) as defined in the 11th version of the International Classification of Diseases (ICD-11). This study aimed to investigate a psychometric evaluation of the ITI and to finalise the English language version.

Method: The latent structure, internal consistency, interrater agreement, and convergent and discriminant validity were evaluated with data from a convenience sample, drawn from an existing research cohort, of 131 trauma exposed participants from the United Kingdom reporting past diagnosis for PTSD or who had screened positively for traumatic stress symptoms. A range of self-report measures evaluating depression, panic, insomnia, dissociation, emotion dysregulation, negative cognitions about self, interpersonal functioning and general wellbeing were completed.

Results: Confirmatory factor analysis supported an adjusted second-order two-factor model of PTSD and disturbances in self-organisation (DSO) symptoms, allowing affect dysregulation to also load onto the PTSD factor, over alternative models. The ITI scores showed acceptable internal consistency, and interrater reliability was strong. Findings for convergent and discriminant validity were mostly as predicted for PTSD and DSO domains. Correlations with the ITQ were good but coefficients for the level of agreement of PTSD diagnosis and CPTSD diagnosis between the ITI and the ITQ were weaker, and item level agreement was variable.

Conclusion: Results provide support for the reliability and validity of the ITI as a measure of ICD-11 PTSD and CPTSD. Final revisions of the ITI are described.

Entrevista Internacional de Trauma (ITI): desarrollo de una entrevista diagnóstica semiestructurada y evaluación en una muestra del Reino Unido

Antecedentes: La Entrevista Internacional de Trauma (ITI en su sigla en inglés) es una herramienta estructurada, administrada por profesionales clínicos, desarrollada para evaluar el trastorno de estrés postraumático (TEPT) y el TEPT complejo (TEPT-C), según se define en la 11.ª versión de la Clasificación Internacional de Enfermedades (CIE-11). Este estudio tuvo como objetivo investigar una evaluación psicométrica de la ITI y finalizar la versión en idioma inglés.

Método: Se evaluaron la estructura latente, la consistencia interna, la concordancia interobservador y la validez convergente y discriminante con datos de una muestra por conveniencia, extraída de una cohorte de investigación existente, de 131 participantes del Reino Unido expuestos a trauma que informaron haber sido diagnosticados previamente con TEPT o que habían dado positivo en la prueba de detección de síntomas de estrés traumático. Se completaron diversas medidas de autoinforme que evaluaban la depresión, el pánico, el insomnio, la disociación, la desregulación emocional, las cogniciones negativas sobre uno

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International Trauma Interview; PTSD; complex PTSD; confirmatory factor analysis; International Trauma Questionnaire

PALABRAS CLAVE
Entrevista Internacional de Trauma; TEPT; TEPT complejo; análisis factorial confirmatorio; Cuestionario Internacional de Trauma

HIGHLIGHTS

- An initial evaluation of the ITI, a diagnostic interview measure of ICD-11 PTSD/CPTSD, is presented.
- The latent structure of the ITI corresponds with the proposed description of ICD-11 PTSD and CPTSD following an adjustment, allowing hyperactivation to load onto the PTSD factor.
- The ITI is a psychometrically sound clinical measure of ICD-11 PTSD and CPTSD, with findings similar to those obtained in previous reports in different languages.

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mismo, el funcionamiento interpersonal y el bienestar general.
Resultados: El análisis factorial confirmatorio respaldó un modelo bifactorial de segundo orden ajustado para el TEPT y los síntomas de alteración de la autoorganización (AAO), lo que permitió que la desregulación afectiva también influyera en el factor TEPT, en comparación con otros modelos. Las puntuaciones de la ITI mostraron una consistencia interna aceptable y una alta fiabilidad interobservador. Los hallazgos de validez convergente y discriminante coincidieron en su mayoría con lo previsto para los dominios de TEPT y AAO. Las correlaciones con el ITQ fueron buenas, pero los coeficientes para el nivel de concordancia del diagnóstico de TEPT y TEPT-C entre la ITI y la ITQ fueron más débiles, y la concordancia a nivel de ítem fue variable.
Conclusión: Los resultados respaldan la fiabilidad y validez de la ITI como medida del TEPT y el TEPT-C según la CIE-11. Se describen las revisiones finales de la ITI.

1. Introduction

The 11th revision of the International Classification of Diseases (ICD-11) was published by the World Health Organisation (WHO) in 2019 (World Health Organisation, 2019). This revision saw the reconceptualisation of the requirements for post-traumatic stress disorder (PTSD) and the introduction of complex PTSD (CPTSD). PTSD consists of three symptom clusters: re-experiencing in the here and now through nightmares or flashbacks, avoidance of internal or external trauma reminders, and heightened sense of current threat typically experienced through an enhanced startle reaction or hypervigilance. For diagnosis, PTSD symptoms in each cluster must be present for a few weeks and cause functional impairment. CPTSD includes the three PTSD symptom clusters plus problems with disturbances in self-organisation (DSO) indicated by severe and pervasive problems with affect regulation, negative self-concept, and disturbed relationships, also causing functional impairment. Diagnosis of either PTSD or CPTSD is mutually exclusive. There is now a strong evidence base supporting these two distinct disorder profiles in trauma exposed populations in a range of cultures and countries (Brewin et al., 2017; Ho et al., 2020; Maercker et al., 2022; Redican et al., 2021).

A guiding principle of the revised ICD-11 system was to improve the clinical utility and global applicability of diagnoses (Maercker et al., 2013). The ability to accurately identify and diagnose those with PTSD and CPTSD using straightforward and comprehensible assessment instruments that are psychometrically sound across different populations is a basic requirement. The International Trauma Questionnaire (ITQ) (Cloitre et al., 2018) is the most widely used self-report measure of ICD-11 PTSD and CPTSD and has been evaluated in a range of cultures and populations in low, middle, and high-income countries. These studies have consistently demonstrated support for its internal consistency, factorial validity, convergent and discriminant validity (Redican et al., 2021). Other self-report measures including the Complex Trauma Inventory (Litvin et al., 2017), and the German language Screening for Complex PTSD (SkPTBS) (Dorr et al., 2018) have been developed but not widely evaluated. Whilst empirical support so far for the ITQ is very encouraging, structured clinician-administered diagnostic assessments are generally seen as the gold standard for assessing trauma related disorders in clinical practice (Spoont et al. 2013).

The International Trauma Interview (ITI) (Roberts et al., 2018) is, to our knowledge, the first structured clinician-administered measure that assesses ICD-11 PTSD and CPTSD. ICD-11 differs from the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revised (DSM-5-TR) (American Psychiatric Association, 2022) in that disorders are defined through a narrative description which the team developing the ITI undertook to operationalise. The ITI has evolved through several draft versions. PTSD items operationalising the ICD-11 re-experiencing, avoidance, sense of current threat, and functional impairment requirements were developed based on similar items from the Clinician-Administered PTSD Scale for DSM-5 (CAPS-5) (Weathers et al., 2018), with the nightmare and flashback items refined based on the unique conceptualisation of PTSD core features proposed by Brewin et al. (2009). DSO items were developed through several iterations based on the literature, discussion between ITI authors, feedback from conference presentations, and seminars with experts from different countries. A pilot version operationalised the DSO items through four items (two items evaluating emotion dysregulation through hyperactivation and deactivation, and one item each evaluating negative self-concept and disturbed relationships). Feedback from experts in the field suggested difficulties in item comprehension and challenges investigating factor structure based on the use of such a small number of items (Bisson et al., 2015). A second version initially comprising 17 DSO items was developed based on a survey of experts who identified the most frequent and impairing DSO symptoms (Cloitre et al., 2011). This iteration was undertaken in parallel with the development of the ITQ and

refined down to six DSO items following evaluation of the ITQ items (Cloitre et al., 2018; Hyland et al., 2017; Shevlin et al., 2018).

Draft versions of the ITI have been translated into several languages. The first evaluation (version 2 of the ITI) was conducted in a Swedish trauma exposed sample of 184 adults, recruited online and via mental health care providers (Bondjers et al., 2019). This study tested seven models of the latent structure of the ITI items using confirmatory factor analysis (CFA). Three models provided an excellent fit to the data and were statistically indistinguishable. These were (i) a six-factor correlated model, (ii) a two-factor second order model where higher-order 'PTSD' and 'DSO' factors explained the covariation between the first-order factors, and (iii) a model with a second order DSO factor but no second order PTSD factor. The second order model was chosen in subsequent analysis as it was more parsimonious and consistent with ICD-11 requirements for a diagnosis of CPTSD. The study also reported satisfactory interrater reliability, acceptable internal consistency, and indications of good convergent and discriminant validity in relation to several self-report measures.

Following the Swedish study, the six DSO items were refined to include added prompts, and additional scoring criteria were developed to improve the consistency of scoring. An evaluation of this revised version was undertaken based on a sample of 103 adult Lithuanian trauma exposed persons, recruited online and via mental health care providers (Gelezelyte et al., 2022). The latent structure of the ITI was evaluated using CFA, and as with the findings from Sweden, the best-fitting model was the two-factor second-order model. The ITI showed good convergent and discriminant validity against a variety of other measures. This study also investigated the level of agreement between the ITI and ITQ, and found moderate consistency between respective PTSD, DSO and total scores on the two measures, but there was only fair-to-moderate agreement on individual symptom clusters, with agreement on sense of current threat and affect dysregulation being poor.

Since then, the German version has been evaluated in two samples: a German military treatment seeking outpatient sample with 100 individuals and a mixed sample of 143 civilians recruited from psychiatric inpatient and outpatient services in Germany and Switzerland (Bachem et al., 2024). For the military sample, a six-factor correlated model and a two-factor second-order model both showed an excellent fit. However, none of the models demonstrated good fit in the civilian sample. Inter-rater agreement, tested only in the military sample, was good. The authors reported support for the convergent validity of the ITI against several self-report measures but the picture for discriminant validity was more mixed, particularly for the military sample. The authors recognised that the training provided to interviewers might not have been optimal and that this might have contributed to the mixed results. More recently, the psychometric properties of the Korean version have been investigated in a mostly female sample of 103 trauma exposed treatment seeking individuals, in South Korea (Choi et al., 2025). The authors tested five models through CFA. Both the two-second order model and an alternative two factor model combining reexperiencing and avoidance provide a good fit, with the latter model being judged to have the best fit overall. ITI PTSD and DSO demonstrated convergent and discriminant validity with a number of measures, as hypothesised. Interrater and internal consistency were found to be acceptable. The authors also explored the degree of agreement and consistency between the ITI and the ITQ, with fair to modest levels of agreement, for most comparisons, apart from the hyperactivation items. Finally, a Danish study has recently evaluated the PTSD section of the ITI in a sample of 198 refugees (Vindbjerg et al., 2023). All participants met ICD-10 diagnostic requirements for PTSD assessed by clinical diagnostic interview. The study tested one – (PTSD), two – (combining reexperience and avoidance) and three-factor (reexperiencing, avoidance, and threat) models and found that whilst both the two and three factor models had adequate fit, the available data slightly favoured the two-factor model. Findings also indicated poorer loading for the hypervigilance item, an issue which has not been observed in other studies.

1.1. Aims of the study

The current study, which was undertaken in parallel with the Lithuanian study, sought to evaluate the same English language version (v3) of the ITI, in a trauma exposed sample of individuals with a history of mental health difficulties, with a secondary aim to evaluate the performance of the ITQ in comparison with the ITI. We aimed to investigate the latent symptom structure of the ITI, as well as internal consistency, interrater reliability, and convergent and discriminant validity. Following satisfactory completion of the Lithuanian and English evaluations, we hoped to produce a final version of the ITI for general release. We hypothesised that (i) the latent structure of the ITI would be best represented by a second-order two-factor model consistent with prior findings (Bondjers et al., 2019; Gelezelyte et al., 2022); (ii) the ITI would produce scores that have good internal consistency and interrater reliability; (iii) PTSD symptoms would be more closely associated

with a measure of anxiety and insomnia (Bondjers et al., 2019), and DSO symptoms would be more strongly associated with problems in emotion regulation, negative beliefs about self, increased interpersonal problems, depressive symptoms, dissociative symptoms, symptoms of borderline personality disorder, and poorer global functioning. We also sought to investigate the relationship between the ITI and the ITQ. In this analysis we considered the ITI to be the reference standard and the ITQ to be a screener. We hypothesised that there would be strong positive correlations between the summed PTSD and DSO scores from the ITI and ITQ and satisfactory diagnostic concordance between the two measures (Brewin et al., 2017; Maercker et al., 2022; Redican et al., 2021). Based on the previous Lithuanian study (Gelezelyte et al., 2022), we expected that associations at the item level would be more variable.

2. Materials and methods

2.1. Procedure

Ethical approval for this study was provided by the Wales Research Ethics Committee and complied with the World Medical Association Code of Conduct. Participants were a convenience sample recruited to this study through the National Centre for Mental Health (NCMH – http://ncmh.info/), a Welsh Government funded research centre that operates in partnership with the National Health Service (NHS) across Wales and England. NCMH hosts a cohort of participants both with and without lived experience of a variety of psychiatric disorders, recruited on a rolling basis from 2011 onwards using several systematic approaches in primary and secondary health care services, including (World Health Organisation, 2019) the identification of potential participants by clinical care teams; and (Brewin et al., 2017) screening of clinical notes. Non-systematic recruitment approaches included advertisements and engaging third-sector organisations to promote the research. NCMH participants were eligible for this study if they were over 18, had consented to being contacted about future research, and reported having previously been diagnosed with PTSD or reported exposure to an ICD-11 qualifying traumatic event and screened positively for PTSD on either the Trauma Screening Questionnaire (TSQ), with a score of 6 or more, (Brewin et al., 2002) or the PTSD items of the ITQ (Cloitre et al., 2018), using the diagnostic scoring algorithm, when first recruited to the NCMH cohort. The TSQ is a brief screening instrument. A score of 6 or more has been found to provide an excellent prediction of PTSD diagnosis (Brewin et al., 2002). Individuals who met criteria for this study were initially contacted by telephone by a researcher who explained what the study involved. For those individuals who agreed to take part, a research interview to complete the ITI and a diagnostic assessment for borderline personality disorder was then scheduled. At the same time participants were sent a link to an online survey including several electronic questionnaires which they were asked to complete prior to the interview. However, some participants completed questionnaires following interview. The ITI interviewers were blind to participants' questionnaire responses.

Participant recruitment took place between October 2019 and April 2022. It was initially intended that all interviews would be conducted face-to-face. However, the onset of the COVID-19 pandemic meant that interviews had to be suspended in March 2020 after 33 participants had been recruited. Interviewing via Zoom resumed in January 2021. The interview team comprised a graduate research assistant, a trainee psychiatrist, a PhD student, and a trainee clinical psychologist, all with extensive experience of conducting research interviews with mental health service users. Interviewers were trained in administration of the ITI by the first author and received regular supervision throughout the study where they were able to discuss administrative and scoring concerns.

2.2. Participants

A total of 288 eligible individuals were contacted by the study team and 133 agreed to take part and attended the interview (participation rate = 46.2%). The interview with one participant was discontinued due to concerns that they were acutely mentally unwell. Data from a second individual were excluded from analysis as the event that they identified as most distressing did not fulfil ICD-11 trauma exposure requirements for an extremely threatening or horrific event. Twelve individuals completed the interview but did not complete the online questionnaires. This resulted in a final sample of 131 who completed the ITI, for 119 of whom full data were available.

A description of sample characteristics is provided in Table 1. Around two thirds of the participants were female and most identified as being white. Based on responses on the Life Events Checklist for DSM-5, participants reported exposure to a mean of 7.5 different types of traumas (range 2-15). The most common type of exposure was physical assault (75.6%), followed by transportation accident (60.3%), with the most commonly reported worst traumas being sexual assault (20.6%), followed by physical assault (18.3%). Participants reported exposure to a mean of 4.6 different types of adverse childhood events (range 0-13; SD = 3.2). Feeling lonely or rejected was the most

Table 1. Descriptive characteristics of sample.

Characteristic	Sample = 131	
Age (mean, SD)	46.7 (13.3)	
Range	23–72	
Gender		
Female	89 (67.9%)	
Male	42 (32.1%)	
Ethnic background		
White	121 (92.4%)	
Mixed Race	4 (3.1%)	
Asian	2 (1.5%)	
Other	2 (1.5%)	
Not reported	2 (1.5%)	
Educational attainment		
Left school without qualification	2 (1.5%)	
Left school with secondary school qualifications	22 (16.8%)	
Left school with advanced secondary school qualifications	23 (17.6%)	
Vocational or other qualifications	7 (5.3%)	
Completed a university degree or higher education	57 (43.5%)	
Not reported	20 (15.3%)	
Military experience		
Yes	26 (19.8%)	
No	105 (80.2%)	
Prevalence of exposure and self-identified worst trauma on the LEC-5	**Life-time exposure**	**Worst**
Natural disaster	23 (17.6%)	0 (0%)
Fire or explosion	42 (32.1%)	3 (2.3%)
Transportation accident	79 (60.3%)	12 (9.2%)
Serious accident	49 (37.4%)	2 (1.5%)
Exposure to toxic substances	26 (19.8%)	0 (0%)
Physical assault	99 (75.6%)	24 (18.3%)
Assault with a weapon	46 (35.1%)	3 (2.3%)
Sexual assault	50 (38.2%)	27 (20.6%)
Other unwanted or uncomfortable sexual experiences	68 (51.9%)	2 (1.5%)
Combat or exposure to war	23 (17.6%)	15 (11.4%)
Held in captivity	22 (16.8%)	2 (1.5%)
Life threatening illness or injury	69 (52.7%)	6 (4.6%)
Severe human suffering	50 (38.2%)	4 (3.1%)
Sudden violent death	72 (55.0%)	10 (7.6%)
Sudden unexpected death of someone close	61 (46.6%)	4 (3.1%)
Serious harm of death you caused	24 (18.3%)	0 (0%)
Other	72 (55.0%)	17 (13.0%)
(Traumatic birth)		5 (3.8%)
(Prolonged domestic abuse)		7 (5.3%)
(Multiple threatening experiences occurring in childhood in the context of chronic neglect, emotional and/ or physical abuse)		5 (3.8%)
Not reported	12 (9.2%)	0 (0%)
Prevalence of exposure to adverse childhood experiences		
Emotional abuse	57 (43.5%)	
Physical abuse	47 (35.9%)	
Sexual abuse	39 (29.8%)	
Emotional neglect	60 (45.8%)	
Physical neglect	18 (13.7%)	
Parental divorce or separation	36 (27.5%)	
Exposure to domestic violence	26 (19.8%)	
Exposure to problematic drug or alcohol misuse	29 (22.1%)	
Exposure to mental illness	47 (35.9%)	
Family member imprisoned	8 (6.1%)	
Childhood bullying	48 (36.6%)	
Experience of being lonely or rejection	81 (61.8%)	
Exposure to neighbourhood violence	18 (13.7%)	
Experience of poverty	44 (33.6%)	
Experience of parental loss	28 (21.4%)	
Not reported	12 (9.2%)	

common ACE experience (61.8%), followed by emotional neglect (45.8%) and emotional abuse (43.5%). Childhood physical abuse and sexual abuse were reported by 35.9% and 29.8% of respondents respectively. Comorbidity was common. Where data were available, 10.1% participants met diagnosis for borderline personality disorder; 57.8% screened positive for a probable diagnosis of depression of at least moderate severity; 37.3% screened positive for probable panic disorder; and 48.3% scored at a level suggestive of moderate to severe clinical insomnia.

2.3. Measures

The International Trauma Interview (ITI) (Roberts et al., 2018) is a semi structured interview consisting of two sections. The ITI is designed to be completed following the administration of a checklist evaluating history of trauma exposure, such as the International Trauma Exposure Measure or the Life Events Checklist for DSM-5 (Hyland et al., 2021; Weathers et al., 2013). Interviewers are guided to assess for each problem against the descriptors provided in ICD-11

(World Health Organisation, 2019). All PTSD and DSO items begin with an initial question inquiring about the presence of the target problem, followed by a series of additional prompt questions, some of which are optional, which seek to clarify whether the information provided meets the item scoring criteria, and to establish the severity of the problem. The first section begins with an item inquiring about the interviewee's worst trauma experience to ensure that this fulfils the ICD-11 trauma exposure requirements, and this experience then serves as the focus for inquiring about PTSD symptoms. Section 1 includes six items inquiring about PTSD symptoms, with two items for each of the three symptom clusters: re-experiencing through nightmares and flashbacks (including intrusive memories, images or emotional reminders in the here and now), internal and external avoidance, and heightened perception of current threat (hypervigilance and heightened startle). Like the CAPS-5 (Weathers et al., 2018), items are scored for symptom severity using five rating options, ranging from 0 = 'absent' to 4 = 'extreme/incapacitating', with severity being determined by the frequency and intensity of the problem. A score of 2 = 'moderate/threshold' is required for a symptom to count towards diagnosis. Two additional items evaluate whether PTSD symptoms cause impairments in social or occupational functioning, and one item asks about symptom duration. A diagnosis of PTSD can be made if a respondent reports exposure to an extremely threatening or horrific experience, endorses at least one symptom from each of the three clusters at threshold level, describes at least threshold level functional impairment, and symptoms have been present for at least a few weeks, operationalised as three weeks or more for the purposes of this study.

In Section 2, a further six items inquire about DSO symptoms, with two items for each of the three DSO clusters: affect dysregulation (one item each for hyperactivation and deactivation), negative self-concept (feeling a failure, feelings of worthlessness) and disturbed relationships (feeling distant or cut off from others, difficulty being emotionally close to others). DSO items are also scored on a five-point Likert scale from 0 = 'not at all' to 4 = 'extremely', with problems requiring a score of at least 2 = 'moderately' to contribute to diagnosis. Items are scored on the basis of a persistent and pervasive problem, with scoring guidance directing the interviewer to consider the extent of the problem and the frequency with which it occurs, in making their judgement. Like in Section 1, two additional items evaluate whether DSO symptoms cause impairment in social or occupational functioning. One item asks the interviewer to rate overall validity of responses, to indicate when factors such as problems with concentration or item comprehension might call into question the credibility of a participant's responses. No participants were excluded based on this item. A diagnosis of CPTSD can be made if the respondent meets all requirements for PTSD, endorses at least one DSO symptom from each of the three clusters at least at a threshold level (and these are judged to be trauma-related) and describes at least a threshold level functional impairment. For CPTSD, DSO items are intended to describe persistent and pervasive behaviours and symptoms. The ITI therefore requires that symptoms were present for at least 3 months to be defined as *persistent*.

Participants also completed a set of standard self-report measures which included the *Life Event Checklist for DSM-5 (LEC-5)* (Weathers et al., 2013), the *Revised Inventory of Adverse Childhood Events (RIACE)* (Finkelhor et al., 2015), nine items assessing features of borderline personality disorder from the *Structured Clinical Interview for DSM-IV (SCID II)* (First et al., 1997), the ITQ, the depression and panic modules of the *Patient Health Questionnaire (PHQ)* (Spitzer et al., 1999), the *Insomnia Severity Index (ISI)* (Bastien et al., 2001), the *Dissociative Symptoms Scale (DSS)* (Carlson et al., 2018), the 21-item *Negative Cognitions about Self* subscale of the *Post-Traumatic Cognitions Inventory (PTCI)* (Foa et al., 1999), to assess features of negative self-concept, the *Difficulties in Emotion Regulation Scale (DERS)* (Gratz & Roemer, 2004), the *IIP-32* (Barkham et al., 1996), a 32-item version of the 127-item *Inventory of Interpersonal Problems* (IIP) (Horowitz et al., 1988) to assess interpersonal functioning and the *WHO-5* (Psychiatric Research Unit, WHO Collaborating Center for Mental Health, 1998) to assess general wellbeing. A fuller description of these measures including the Cronbach alpha for the study sample can be found in supplementary materials.

2.4. Data analysis

The analytic plan for this study was based on six phases. First, *ICD-11* PTSD and CPTSD diagnostic rates based on the ITI were calculated, and differences in prevalence rates were assessed across a number of sociodemographic variables.

Second, the latent structure of the ITI was assessed using CFA. Three models were tested: a unidimensional model where all items loaded on to a single factor, a correlated six-factor model where each factor is represented by the two symptom indicators, and a two-factor second-order model (see Figure 1). As the ITI uses a five-point Likert response scale, models can be estimated using the robust maximum likelihood (MLR) (Topp et al., 2015) estimator and the weighted least squares mean – and variance-adjusted (WLMSV) (Flora & Curran, 2004) estimator. Thus, the three models were tested using both estimators for comprehensiveness. Standard recommendations were followed for determining model fit (Hu &

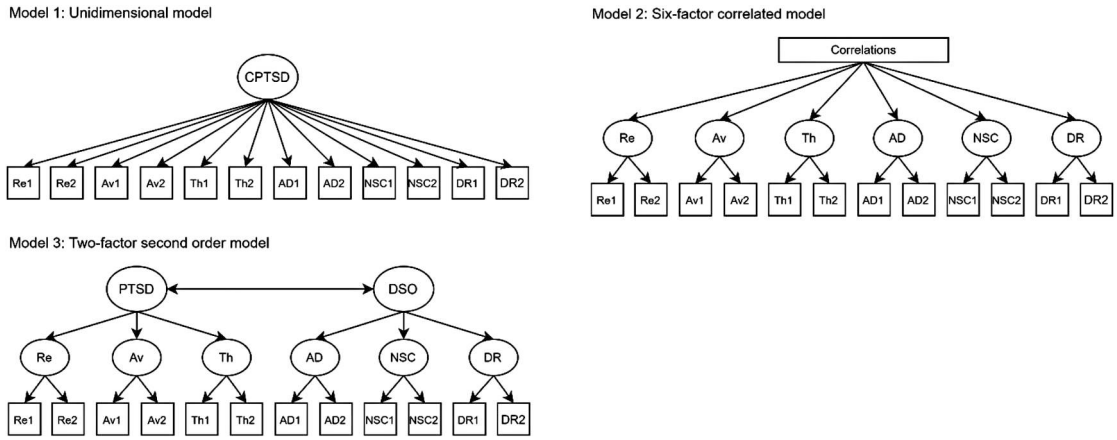

Figure 1. Alternative models of the latent structure of ICD-11 PTSD and CPTSD symptoms.

Note. PTSD = Posttraumatic Stress Disorder, DSO = Disturbances in Self-Organisation, CPTSD = Complex Posttraumatic Stress Disorder, Re = Re-experiencing, Av = Avoidance, Th = Sense of current threat, AD = Affect dysregulation, NSC = Negative-self-concept, DR = Disturbed relationships.

Bentler, 1999). Acceptable model fit is indicated by a non-significant χ^2 test result; Comparative Fit Index (CFI) and Tucker-Lewis Fit Index (TLI) values $\geq .90$ with values closer to 1 indicating better model fit; and Root Mean Square Error of (RMSEA) and Standardised Root Mean Square Residual (SRMR) values $\leq .08$ with values closer to 0 indicating better model fit. The Akaike Information Criterion (AIC), Bayesian Information Criterion (BIC), and sample size adjusted BIC (ssaBIC) statistics were used to compare alternative models when estimated using MLR, and in each case, the model with the lowest value was deemed to be the better fitting model.

Third, following selection of the optimal fitting measurement model of the ITI, the internal consistency of the ITI was assessed using omega reliability (ω) analysis (Raykov, 1997) which is superior to the more commonly used coefficient alpha as it does not assume tau equivalence and is based on the standardised factor loadings from the CFA. ω values range from 0–1 with higher scores reflecting higher internal consistency.

Fourth, interrater reliability for the full measure, and for the PTSD and DSO subscales separately, was calculated using intraclass correlations (two-way mixed model with measures of absolute agreement) of independent scoring of 10 interview recordings by a second rater.

Fifth, nine observed criterion variables (i.e. total scores for panic, insomnia, dissociation, emotional regulation problems, negative beliefs about the self, interpersonal problems, psychological wellbeing, depression, and borderline personality) were simultaneously regressed on to the latent variables from the best fitting measurement model of the ITI using structural equation modelling.

Sixth, ITI and ITQ scores were assessed in relation to one another. Scoring of the ITQ for diagnostic agreement followed the same rules as for the ITI and is reported more fully in the supplementary material. Correlations between the ITI and ITQ total and subscale scores were assessed using Pearson product-moment correlation coefficients. Sensitivity, specificity, positive predictive values (PPV), and negative predictive values (NPV) were calculated at the item and diagnostic level to estimate the probability of meeting the requirements for one measure, given that the requirements were met for the other measure. Additionally, Cohen's kappa values (κ) were calculated to determine the level of diagnostic agreement between the ITI and ITQ at the item and diagnostic levels. Values range from −1 to 1; values ≤ 0 indicate no diagnostic agreement, .01 to .20 indicate 'slight' agreement, .21 to .40 indicate 'fair' agreement, .41 to .60 indicate 'moderate' agreement, .61 to .80 indicate 'substantial' agreement, and .81–1.00 indicate almost perfect agreement (Cohen, 1960; Landis & Koch, 1977).

All analyses were performed using SPSS version 28 and Mplus version 8.2 (Methuen & Methuen, 2018). Missing data were present for 18 participants (13.7%) on various self-report measures including the ITQ. As the missingness was on the criterion variables in the structural equation model, missingness was handled using full information maximum likelihood estimation under MLR estimation and, therefore, there was no loss of sample size for this section of the analyses. However, for analyses of item and diagnostic agreement across the ITI and ITQ, listwise deletion was necessarily applied.

2.5. Decisions about final content

Following data analyses, a seminar was convened on the 1st September 2022 of 20 experts very familiar with the ITI from 10 different countries where findings from the Swedish (Bondjers et al., 2019), Lithuanian (Gelezelyte et al., 2022), and UK evaluations, and preliminary analyses from the Swiss/

Table 2. Sociodemographic differences in rates of ICD-11 PTSD and CPTSD.

	ICD-11 PTSD	ICD-11 CPTSD
Sex		
Male	24.4%	14.6%
Female	12.4%	22.5%
	$\chi^2 = 3.00$, $p = .083$, OR = 0.44	$\chi^2 = 1.08$, $p = .299$, OR = 1.69
Educational background		
Degree or above	20.8%	12.3%
Below degree level	16.3%	26.4%
	$\chi^2 = 1.44$, $p = .230$, OR = 0.54	$\chi^2 = 3.55$, $p = .059$, OR = 0.39
Military service		
No	14.3%	21.9%
Yes	24.0%	12.0%
	$\chi^2 = 1.41$, $p = .236$, OR = 1.90	$\chi^2 = 1.24$, $p = .266$, OR = 0.49
Mean age		
No	46.6 (12.9)	47.1 (13.7)
Yes	46.8 (15.6)	44.7 (14.4)
	$t = -.07$, df = 128, $p = .95$	$t = .90$, df = 128, $p = .42$
Age at the time of index trauma		
No	23.3 (14.1)	24.1 (14.8)
Yes	25.2 (17.2)	21.3 (13.9)
	$t = -57$, df = 128, $p = .57$	$t = .88$, df = 128, $p = .38$

Note: χ^2 = Pearson chi-square test; p = statistical significance; OR = odds ratio related to second category for each comparison; all degrees of freedom = one; t = independent t test.

German study (Bachem et al., 2024), were presented and decisions about final revisions to the ITI were made based on discussion and consensus. Final revisions mainly reflected recent refinements to the ICD-11 PTSD and CPTSD requirements (World Health Organisation, 2019).

3. Results

In total, 36.2% ($n = 47$; 95% CI = 27.8%, 44.5%) met diagnostic requirements for *ICD-11* PTSD or CPTSD based on the ITI. Specifically, 16.2% ($n = 21$; 95% CI = 9.7%, 22.6%) met requirements for PTSD only, while 20.0% ($n = 26$; 95% CI = 13.0%, 27.0%) met requirements for CPTSD. The proportion of people meeting requirements for PTSD and CPTSD was not significantly different (Z = −0.73, $p = .466$) A breakdown of diagnostic rates based on different sociodemographic characteristics is provided in Table 2. Rates of PTSD and CPTSD did not differ depending on participant sex, educational background, and history of military service, and there was no significant difference based on mean age at assessment, or age at the time of the index trauma exposure.

3.1. Factorial validity and reliability of the ITI

The CFA results based on MLR and WLSMV estimation are presented in Table 3. The one-factor model was a poor representation of the sample data and was therefore rejected. The correlated six-factor model and the higher-order model each provide close fit to the sample data. The BIC value was slightly lower for the higher-order model relative to the six-factor model, but differences in overall fit between the models across all indices were extremely small. Effectively, both models were deemed to be viable solutions.

There was evidence of a Heywood case for the higher-order model; the first-order affective dysregulation factor loaded onto the second-order DSO factor above 1 (1.04). Standardised factor loadings above 1.0 are possible (they occur in the presence of high factor correlations) and are not necessarily indicative of a mis-specified model (Chen et al., 2001). Nevertheless, this effect could be readily understood in the context of both previous empirical research (Bondjers et al., 2019; Fox et al., 2022; Hyland et al., 2017; Karatzias et al., 2016; Karstoft et al., 2025) and a theoretical description of the nature of CPTSD (Hyland et al., 2023). The hyperarousal component of the Affective Dysregulation cluster can, in part, be explained by the PTSD factor (Hyland et al., 2023), and thus the imposed zero-loading on this factor was thought to be the problem. A cross-factor loading from the second-order PTSD factor to the first-order Affective Dysregulation factor was added and the model was re-estimated. This model estimated normally, and model fit results are presented in Table 3. Given the more parsimonious nature of the higher-order model, we took this model forward for subsequent SEM analysis given the small sample size available in this study.

The first and second-order factor loadings are presented in Table 4 (the factor loadings and factor correlations for the six-factor correlated model are available in Supplementary Table 1). All first-order factor loadings were positive, strong, and statistically significant ($ps < .001$). The first-order factors of re-experiencing, avoidance, and sense of threat loaded onto the PTSD second-order factor positively, strongly, and significantly ($ps < .001$). The factor loading for affective dysregulation on PTSD was .40 ($p = .051$). The first-order affective dysregulation, negative self-concept, and disturbed relationship factors loaded onto the second-order DSO factor positively, strongly, and significantly

Table 3. Model fit statistics for the tested models of the International Trauma Interview.

Model	Estimator	χ^2	*df*	*p*	CFI	TLI	RMSEA (90% CI)	SRMR	AIC	BIC	ssaBIC
One-factor model	MLR	234.87	54	<.001	.664	.589	.160 (.139 – .181)	.091	4377	4481	4367
	WLSMV	246.42	54	<.001	.880	.853	.165 (.144, .186)	.111			
Six-factor model	MLR	55.30	39	.044	.970	.949	.056 (.010 – .089)	.043	4227	4373	4212
	WLSMV	50.77	39	.098	.993	.988	.048 (.000 – .082)	.041			
Higher-order model	MLR	66.92	47	.030	.963	.948	.057 (.019 – .086)	.049	4223	4347	4211
	WLSMV	57.47	47	.140	.993	.991	.041 (.000 – .074)	.048			
Higher-order model *	MLR	63.45	46	.045	.968	.953	.054 (.009 – .084)	.047	4222	4348	4209
	WLSMV	55.70	46	.155	.994	.991	.040 (.000 – .074)	.046			

Note: $n = 131$; χ^2 = Chi-square Goodness of Fit statistic; *df* = degrees of freedom; *p* = Statistical significance; CFI = Comparative Fit Index; TLI = Tucker Lewis Index; RMSEA (90% CI) = Root-Mean-Square Error of Approximation with 90% confidence intervals; SRMR = Standardised Root-Mean Square Residual; AIC = Akaike Information Criterion; BIC = Bayesian Information Criterion; ssaBIC = sample size adjusted BIC; * = model includes a cross-factor loading from the second-order PTSD factor to the first-order affective dysregulation factor.

(*p*s < .001). The second-order PTSD and DSO factors were positively correlated ($r = .65$, $p < .001$).

3.2. Internal consistency and interrater reliability

The internal consistency of the six PTSD items (ω = .85) and the six DSO items (ω = .91) were good. The intraclass correlation for the full measure, and for the PTSD and DSO scales individually were strong (.93, .94, and .91 respectively).

3.3. Convergent and discriminant validity results

Table 5 displays the standardised regression coefficients for the effect of the PTSD and DSO latent variables on each criterion variable. The overall model fit the data acceptably (χ^2 (136) = 198.07, $p < .001$, CFI = .951, TLI = .925, RMSEA = .059 (95% CI = .040, .076), SRMR = .050). The PTSD and DSO factors accounted for 24.2% of variance in panic symptoms ($p = .008$), 28.2% of variance in insomnia symptoms ($p = .003$), 47.4% of variance in dissociation symptoms ($p < .001$), 19.3% of variance in emotional regulation problems ($p = .020$), 62.2% of variance in negative beliefs about the self ($p < .001$), 53.9% of variance in interpersonal problems ($p < .001$), 53.2% of variance in psychological wellbeing ($p < .001$), 61.3% of variance in depression symptoms ($p < .001$), and 18.6% of variance in borderline personality disorder symptoms ($p = .157$).

The PTSD factor alone was significantly and positively associated with panic, insomnia, and dissociation. The DSO factor alone was significantly and positively associated with negative self-beliefs, interpersonal problems, and depression, and was negatively associated with psychological wellbeing scores.

3.4. Comparisons between the ITI and ITQ

Overall, 46.1% ($n = 53$; 95% CI = 36.8%, 55.3%) of people met diagnostic requirements for either *ICD-11* PTSD or CPTSD based on the ITQ, with 10.4% ($n = 12$; 95% CI = 4.8%, 16.1%) meeting the requirements for PTSD and 35.7% ($n = 41$; 95% CI = 26.8%, 44.5%) meeting the requirements for CPTSD. The difference between these proportions was statistically significant ($z = -3.98$, $p < .001$). The PTSD subscale scores on the ITI and ITQ were positively and strongly correlated ($r = .71$, $p < .001$), as were the DSO subscale scores on the ITI and ITQ ($r = .72$, $p < .001$).

Table 4. Standardised factor loadings (and standard errors) for the modified higher-order model.

	RE	AV	TH	AD	NSC	DR
Factor loadings						
Nightmares	.65 (.08)					
Flashbacks	.67 (.07)					
Internal avoidance		.69 (.09)				
External avoidance		.77 (.07)				
Hypervigilance			.65 (.08)			
Startle response			.75 (.09)			
Difficulty calming down				.64 (.07)		
Feeling numb				.57 (.10)		
Failure					.94 (.04)	
Worthless					.79 (.06)	
Distant from others						.88 (.04)
Difficult to stay close to others						.90 (.04)
Second-order factor loadings	**PTSD**	**DSO**				
Re-experiencing (RE)	.94 (.09)					
Avoidance (AV)	.91 (.07)					
Sense of current threat (TH)	.85 (.10)					
Affective dysregulation (AD)	.40 (.21)*	.68 (.21)				
Negative self-concept (NSC)		.77 (.07)				
Disturbances in relationships (DR)		.76 (.07)				

Note: Effects are presented based on MLR estimation; All factor loadings are statistically significant ($p < .001$) except * which is $p = .051$.

Table 5. Standardised regression coefficients for PTSD and DSO on each criterion variable.

	PTSD β (SE)	DSO β (SE)
Panic	**.38 (.17)***	.15 (.17)
Insomnia	**.53 (.17)*****	−.10 (.19)
Dissociation	**.57 (.13)*****	.17 (.14)
Emotional regulation problems	.19 (.16)	.29 (.18)
Negative self-beliefs	.05 (.15)	**.80 (.14)*****
Interpersonal problems	.08 (.12)	**.68 (.12)*****
Psychological wellbeing	.07 (.15)	**−.77 (.14)*****
Depression	.18 (.13)	**.65 (.13)*****
Borderline personality	−.02 (.18)	.41 (.22)

Note: Effects are presented based on MLR estimation; statistical significance indicated by * $p < .05$, ** $p < .01$, *** $p < .001$; β = standardised regression coefficient; SE = standard error.

The sensitivity, specificity, PPV, and NPV of the ITQ, relative to the ITI as a benchmark, for individual symptoms and overall diagnostic status are presented in Table 6. The sensitivity and specificity for meeting ITQ *ICD-11* PTSD or CPTSD was 74.4% and 71.8%, respectively. The PPV and NPV was 61.5% and 82.3%, respectively. These values indicate that of those who met the ITI diagnostic requirements for PTSD or CPTSD, 74.4% also met the ITQ requirements for PTSD or CPTSD. Of those who did not meet the ITI diagnostic requirements for PTSD or CPTSD, 71.8% also did not meet the ITQ requirements for PTSD or CPTSD. Of those who met the ITQ diagnostic requirements for PTSD or CPTSD, 61.5% also met the ITI requirements for PTSD or CPTSD. Of those who did not meet the ITQ diagnostic requirements for PTSD or CPTSD, 82.3% also did not meet the ITI requirements for PTSD or CPTSD.

The sensitivity and specificity of ITQ *ICD-11* PTSD, relative to the ITI as a benchmark, was 26.3% and 92.6%, respectively, and the PPV and NPV was 41.7% and 86.3%, respectively. The sensitivity and specificity of the ITQ *ICD-11* CPTSD was 32.5% and 72.2%, respectively. The PPV and NPV was 37.5% and 87.8%, respectively.

Table 6 presents ITI and ITQ diagnostic comparisons. In terms of identifying those that tested positive for *ICD-11* PTSD or CPTSD, the ITI and ITQ had 'moderate' agreement (κ = .44), while diagnostic agreements for PTSD (κ = .22) and CPTSD (κ = .28), specifically, were 'fair'. At the item level, the lowest levels of agreement were for the items measuring 'Flashbacks' and 'Difficulty staying close to others' for PTSD and DSO items respectively, while the highest agreements were for the items measuring 'Hypervigilance' and 'Feeling a failure'.

3.5. Final ITI revision

As a result of the positive evaluations of the ITI in Swedish (Bondjers et al., 2019), Lithuanian (Gelezelyte et al., 2022), the then unpublished Swiss/German evaluation (Bachem et al., 2024) and the evaluation described in this paper, it was agreed at the seminar of experts familiar with the ITI that a release version 1.0 of the ITI should be finalised and made available through a registration system for researchers and clinicians with appropriate training. The following changes to the final test version were agreed:

- Symptom descriptors were reviewed and revised to reflect recent final refinements to the ICD-11 PTSD and CPTSD requirements (World Health Organisation, 2019) to ensure continuing consistency of language.
- Administration instructions were amended to allow consideration of symptoms related to more than one traumatic event or experience, rather than requiring the assessor to consider only symptoms related to a single worst experience. This decision was made in recognition of the fact that recent research has shown that defining the index trauma in terms of a single worst event or experience appears to underestimate aspects of clinically important symptomatology (Priebe et al., 2018), and that those who have experienced multiple traumas can find it difficult to identify which symptoms result from which traumas (Elbert et al., 2015; Murray & El Leithy, 2022).

Table 6. ITI and ITQ item and diagnostic comparisons with the ITI as the reference standard.

	ITI % (*n*)	ITQ % (*n*)	Sensitivity	Specificity	PPV	NPV	Cohen's κ
Nightmares	36.6 (48)	44.0 (51)	76.2%	74.3%	62.7%	84.6%	.48
Flashbacks	31.3 (41)	51.7 (60)	73.0%	58.2%	45.0%	82.1%	.27
Internal avoidance	53.4 (70)	69.0 (80)	84.1%	49.1%	66.3%	72.2%	.34
External avoidance	58.0 (76)	73.3 (85)	89.9%	51.1%	72.9%	77.4%	.43
Hypervigilance	66.4 (87)	81.9 (95)	96.3%	50.0%	81.1%	85.7%	.52
Startle response	40.5 (53)	64.7 (75)	88.9%	50.7%	53.3%	87.8%	.35
Difficulty calming down	64.9 (85)	78.3 (90)	90.7%	45.0%	75.6%	72.0%	.39
Feeling numb	37.4 (49)	62.1 (72)	88.4%	53.4%	52.8%	88.6%	.37
Failure	47.3 (62)	63.2 (72)	87.0%	58.3%	65.3%	83.3%	.45
Worthless	41.2 (54)	54.3 (63)	80.9%	63.8%	60.3%	83.0%	.42
Distant from others	52.3 (68)	69.0 (80)	85.0%	49.1%	64.6%	75.0%	.35
Difficult to stay close to others	44.3 (58)	58.6 (68)	75.5%	56.5%	59.7%	72.9%	.31
ICD-11 PTSD	16.2 (21)	10.4 (12)	26.3%	92.6%	41.7%	86.3%	.22
ICD-11 CPTSD	20.0 (26)	35.7 (41)	32.5%	72.2%	37.5%	87.8%	.28
ICD-11 PTSD or CPTSD	36.2 (47)	46.1 (53)	**74.4%**	**71.8%**	**61.5%**	**82.3%**	**.44**

Note: PPV = positive predictive value; NPV = negative predictive value; κ = Cohen's kappa value.

- Inclusion of a new test item to evaluate *diminished* startle reaction, which in the absence of an exaggerated startle reaction may contribute to a diagnosis of CPTSD, but not PTSD (World Health Organisation, 2019). In relation to this item, we observed that a small proportion of our sample (N = 3; 2.3%) in this study fulfilled all of the PTSD requirements, apart from persistent perception of heightened current threat, and all DSO requirements, and their diagnostic status may have been positive for CPTSD if diminished startle reaction was assessed.

The release version of the ITI is available via www.iti-cptsd.com in English and other translations.

4. Discussion

The primary aim of this paper was to investigate the psychometric properties of the ITI in a UK English-speaking sample, with the goal of finalising items and content for a final release version. To our knowledge the ITI is the only semi-structured clinician-administered measure for ICD-11 PTSD and CPTSD. The only other model for clinician-administered assessment of ICD-11 PTSD and CPTSD that we are aware of is the Complex PTSD Item Set additional to the CAPS (COPISAC) approach (Lechner-Meichsner & Steil, 2021), which proposes a brief set of additional DSO items to be administered following the CAPS-5 (Weathers et al., 2018), but this has not yet been subject to evaluation in a peer-reviewed journal.

Consistent with a recent evaluation (Gelezelyte et al., 2022) of the same version of the ITI in a Lithuanian sample, we found that both the six-factor correlated model and the two-factor higher-order model provided good fit to the sample data. These models reflect the ICD-11 distinctions between PTSD and DSO symptoms at different levels of abstraction and can therefore be said to be consistent with theory. Both models have been consistently shown to represent the latent structure of the ITQ (Redican et al., 2021). In the higher-order model, the affective dysregulation factor loaded onto the DSO factor above one, but this was readily understood and dealt with by allowing this factor to also load onto the PTSD factor. A recent theoretical description of ICD-11 CPTSD (Hyland et al., 2023) has explained that the affective dysregulation cluster effectively acts a bridge between the PTSD and DSO components of CPTSD, with the hyperactivation component sharing much in common with the other PTSD symptoms, and the deactivation component being unique to the DSO symptoms. By simply acknowledging this effect, the higher-order model could be estimated normally. We recognise that this solution was in part a pragmatic resolution and it wasn't possible to test the bridging relationship fully. Inevitably, there is often a tension between empirical constraints and theoretical structure in SEM, due to issues such as sample size limitations, measurement errors, and missing data, which can result in the need for model simplification to better align with the available data. However, this model provides a feasible theoretically informed modification to our a priori model and given the accumulation of evaluations reporting Heywood cases (Karstoft et al., 2025) this model should be tested further in future ITQ and ITI validation studies.

Study findings showed that the ITI had acceptable internal and interrater reliability and findings mostly supported our expectations about convergent and discriminant validity of the ITI. PTSD symptoms were uniquely associated with panic and insomnia symptoms whereas DSO symptoms were uniquely associated with problems in negative beliefs about self, interpersonal problems, depressive and poorer general wellbeing.

Contrary to our expectations, however, dissociative symptoms were associated with PTSD but not with DSO symptoms, and problems with emotion regulation were not associated with PTSD or DSO. Previous ITI evaluations have reported inconsistent relationships between dissociation and PTSD and DSO symptoms. Bondjers et al. (2019) found that dissociation was associated with DSO symptoms but not PTSD symptoms, whilst Gelezelyte et al. (2022) found that dissociation was associated with PTSD symptoms but not DSO symptoms. There is some evidence from studies using the ITQ that dissociation symptoms may be more common among those that meet diagnostic requirements for CPTSD than those that meet requirements for PTSD (Hyland et al., 2020; Hyland et al., 2024; Jowett et al., 2022; Møller et al., 2021). Moreover, the number and types of dissociation a person experiences may differ depending on whether they have a diagnosis of PTSD or CPTSD. Clearly, more work is required to understand how dissociation relates to the specific symptom clusters of ICD-11 PTSD and CPTSD and attention to the types of dissociation assessed is important.

The examination of the ITI and ITQ scores showed moderate, positive correlations between the PTSD, DSO and total scores of the two measures, which are similar in strength to comparisons for PTSD severity reported between the CAPS-5 and PCL-5 (Roberts et al., 2021; Weathers et al., 2018). However, probable PTSD rates were somewhat lower on the ITQ, whereas CPTSD and combined (either PTSD or CPTSD) diagnostic rates were somewhat higher. Kappa coefficients indicating the presence of either disorder were in the 'moderate' range, but coefficients for the consistency of PTSD diagnosis and CPTSD diagnosis were weaker, with the coefficient for PTSD being particularly poor.

Findings also showed that scoring of the ITQ using the diagnostic algorithm (Cloitre et al., 2018) demonstrated acceptable specificity, as well as acceptable sensitivity for diagnostic 'caseness', in relation to the ITI. However, sensitivity for PTSD and CPTSD alone was poor. At the individual item level, the rates of threshold level endorsement were higher for the ITQ than the ITI for all items. Discrepancies were more evident at the item level, with flashbacks, internal avoidance, heightened startle response, hyperactivation, deactivation, distance from others and difficulty stating close to others, all only achieving a fair level of agreement. We note that there was also poorer agreement for the affect dysregulation items in the Lithuanian and Korean evaluations (Choi et al., 2025; Gelezelyte et al., 2022) Taken together, the findings from this study and the Lithuanian and Korean studies (Choi et al., 2025; Gelezelyte et al., 2022) suggest that the ITI and ITQ have levels of consistency and agreement in scores, item endorsement, and diagnosis which are lower than what might be expected of two measures purporting to capture the same constructs.

Clinician administered measures are generally considered to be the gold standard means of assessing psychiatric disorders because of the perceived reduced risk of bias and superior quality of information they provide, although some authors have challenged this perspective (Hyland & Shevlin, 2024). Several factors may have contributed to differences in response in this study and are worth noting. Firstly, whilst the two measures both use 5-point scoring options, there are a number of differences in phrasing, as well as some differences in the instructions provided. Second, ITQ items are framed in terms of how bothersome symptoms are for the individual (PTSD items) or how true they are (DSO items), whilst ITI items are more weighted towards the extent to which the problem is incapacitating for the respondent and are scored based on the judgement of the interviewer. Third, the ITI requires that DSO symptoms are present for at least 3 months, which is not requirements of the ITQ, and are *probably* or *definitely* trauma related.

Similar discrepancies between comparable item performance on the PTSD self-report and clinician-administered measures have also been observed in several studies evaluating PTSD measures, particularly the PCL-5 in comparison to the CAPS-5 (Cody et al., 2017; Kramer et al., 2023; Lee et al., 2024; Resick et al., 2023), with an observed tendency for people to score more highly on self-report measures than equivalent clinician measures (Lee et al., 2024). For example, in a recent study combining data from four RCTs, Resick et al. (Resick et al., 2023) found that, in addition to total scores, all PCL-5 item scores were higher than equivalent CAPS-5 items at baseline, and most remained higher at posttreatment. The authors observed that a possible explanation for these differences was that participants tended to make use of a wider range of responses on the PCL-5, than the interviewers did on the CAPS-5. In common with interviewers in these PCL-5/ CAPS-5 studies, ITI interviewers in this study were instructed to reserve scoring the presence of a symptom as 'extreme(ly)' to only the most severe and incapacitating examples, and to score conservatively when the interviewer was uncertain about the severity of a specific symptom. No such instructions are provided for the ITQ. Finally, Kramer et al. (2023) identified several factors contributing to discrepancies between PCL-5 and equivalent CAPS-5 items, including item comprehension difficulties, time frame judgment differences and trauma-related attribution issues, which explained some discrepancies when participants were interviewed, after completing both measures. These findings indicate that problems with concordance are not isolated to the ITI and ITQ, and point to a possible broader challenge for the field in the development of partnered clinical interviews and self-report measures. For a broader consideration of some of the limitations to correspondence between PTSD self-report and clinician administer measures, the reader is encouraged to see the recent paper by Lee et al (Lee et al., 2024). Work is now under way to consider and test several refinements to the ITQ to improve its utility as an assessment tool.

This study has several limitations. Firstly, due to the onset of the COVID-19 pandemic, recruitment was suspended for around 10 months and the remaining 100 participants were interviewed by video-link. It is uncertain what impact this had on our findings, although the process of conducting interviews by video-link was undertaken with the same level of rigour as those conducted face-to-face, and this approach is now commonly used in research. Secondly, the sample size is relatively small, and participants were predominantly female, university educated, and there was an underrepresentation of individuals from minority ethnic groups, all of which limits the generalizability of the findings. Interrater reliability, in particular, was estimated with a small number of participants. Thirdly, the sample was largely drawn from an existing research cohort of individuals engaging in mental health research, with often high levels of comorbidity, some of whom will have received psychological and/or pharmacological intervention prior to recruitment into the current study, which may have altered their clinical presentation since they were first recruited into the cohort. In addition, whilst all interviewers were experienced at administering structured clinical assessments and received regular supervision in relation to administration of the ITI and consideration of scoring dilemmas, they were not all qualified clinicians.

Finally, some readers may have concerns that the negative self-concept items (feeling a failure and feelings of worthlessness) don't sufficiently capture the range of responses that may be experienced as a result of certain types of traumas (e.g. feeling dirty, broken or degraded as a result of sexual trauma). The ITI was developed as a measure of traumatic stress symptoms following a range of traumatic stressors (e.g. military trauma, motor vehicle accident) and these two items capture the impact of stressors on sense of self across these different experiences, including sexual trauma, so the language used for each item was chosen to be appropriate to this spectrum of events. Additionally, for all items interviewers are guided in the instructions to hold in mind the definition of the target problem as described in ICD-11 (i.e. for negative self-concept 'beliefs about oneself as diminished, defeated or worthless, accompanied by feelings of shame, guilt or failure related to the traumatic event') when they administer these items.

5. Conclusion

The findings of this study provide initial support for the reliability and validity of the ITI when used in an English-speaking clinical sample. It can now be made available for wider use in research and clinical settings. Thus far, outside of the recent Korean evaluation (Choi et al., 2025), the ITI has mostly been evaluated in European samples (Sweden, Lithuania, UK, Germany, and Switzerland). It will therefore be important to test the psychometric properties and applicability of the ITI in other non-European contexts (Heim et al., 2022). Changes between the version evaluated in this paper and the release version are mostly small, but this new version should therefore be subject to continuing evaluation within a variety of populations and may benefit from additional guidance and item refinement to ensure cultural sensitivity in different settings (Vindbjerg et al., 2023). The value of the ITI as an outcome measure has not yet been explored and should be investigated further. At present the ITI and the ITQ represent different, but overlapping, approaches to assessing ICD-11 PTSD and CPTSD and clinicians and researchers will need to consider the merits of both measures, and the information they provide, when deciding on their use (Resick et al., 2023). The ITQ has been developed as an initial screening instrument, whereas the ITI is a clinical interview and should be the instrument of choice when it is necessary to establish firm PTSD/CPTSD diagnostic status.

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Data availability statement

The data that support the findings of this study are available from the corresponding author upon reasonable request, following procedures established by Cardiff University.

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