**ACCEPTED MANUSCRIPT IN ACTA PSYCHIATRICA SCANDINAVICA**

**Testing the use of ‘clinical checks’ with the International Trauma Questionnaire to measure PTSD and complex PTSD**

Mark Shevlin1, Philip Hyland2, Chris R. Brewin3, Marylene Cloitre4, Thanos Karatzias5, and Enya Redican1

1 School of Psychology, Ulster University, Coleraine, Northern Ireland

2 Department of Psychology, Maynooth University, Kildare, Ireland

3 Division of Psychology and Language Sciences, University College London, London, England

4 Silver School of Social Work,New York University.

5 School of Health & Social Care, Edinburgh Napier University, Edinburgh, Scotland

**Data availability statement:** Data for the current study is not available.

**Author Note**

Corresponding author: Mark Shevlin, Ulster University, School of Psychology, Room H256, Cromore Road, Coleraine, Northern Ireland

**Abstract**

*Background:* The International Trauma Questionnaire (ITQ) is the most widely used measure of ICD-11 Posttraumatic Stress Disorder (PTSD) and Complex PTSD (CPTSD). This self-report scale has been used to estimate prevalence rates of these disorders in general population and clinical samples but concerns abound that prevalence estimates derived from self-report measures are too high. To address this concern, we previously introduced the concept of adding ‘clinical checks’ to self-report measures to ensure initial responses reflected the intended clinical meaning of the scale item. Here we provide a rationale for adding clinical checks to the ITQ, describe the process of developing them, and demonstrate their effect at the symptom, cluster, and disorder levels in a general population sample.

*Methods:* A team of researchers and clinicians, including those who developed the ITQ, developed clinical checks for all ITQ items. These were tested using data from a non-probability quota-based representative sample of adults from the United Kingdom (*N* = 975).

*Results:* Use of clinical checks led to decreases in symptom endorsements ranging from 18.0% to 43.9%, and symptom cluster requirements from 19.1% to 35.9%. Disorder prevalence estimates without the clinical checks were 5.4% for PTSD and 9.5% for CPTSD. With the clinical checks, prevalence estimates dropped to 3.8% for PTSD (relative decrease = 29.6%) and 4.9% for CPTSD (relative decrease = 48.4%).

*Conclusion:* Clinical checks can be easily embedded into the ITQ and have a significant effect on prevalence estimates. We contextualise these results in relation to existing literature on population prevalence estimates derived from clinical interviews, and discrepancies between clinical interviews and self-report measures.

|  |
| --- |
| Significant outcomes   1. Clinical checks reduce ITQ symptom endorsements and overall PTSD/CPTSD prevalence rates. 2. The ITQ with clinical checks provides an alternative approach to assess PTSD and CPTSD, combining key strengths of self-report measures and clinical interviews.   Limitations   1. The non-probability sampling method limits generalizability. 2. Concordance between interview assessments and the ITQ with clinical checks was not examined. 3. Information is lacking on individuals who failed clinical checks and the reasons why. |

**Testing the use of ‘clinical checks’ with the International Trauma Questionnaire to measure PTSD and complex PTSD**

Self-report scales are a quick and inexpensive way to measure the symptoms of a psychological disorder and ascertain if diagnostic requirements are met. This form of assessment is ubiquitous [1], but the development of the items that comprise such scales is not straightforward [2]. Items are designed to describe symptoms, and symptoms of psychological disorders can reflect affective states, cognitive processes, or overt behaviours. Symptoms of psychological disorders do not always differ in an obvious qualitative way from normal feelings, thoughts, and behaviours; often they differ quantitatively. For example, it is perfectly normal and adaptive to worry, but worry can become an indicator of psychopathology when its pervasiveness, intensity, and frequency causes substantial distress and impairment. Therefore, scale items must be capable of describing psychological phenomena in a way that distinguishes symptoms from normal experiences. This is not an easy task when the typical scale item is intended to be a short, simply worded phrase or sentence that is easily understood by all.

There is evidence that self-report scale items may sometimes fail to capture the important clinical essence of symptoms [3]. Compared to clinical interviews, self-report scales often produce higher rates of endorsement for specific symptoms and disorders [4]. This may be due to scale items being unable to adequately convey the intended meaning, intensity, or duration of an experience that makes it symptomatic. Taking the example of worry again, the ICD-11 [5] description of generalised anxiety disorder describes worry in the following terms: “…*excessive worry focused on multiple everyday events…[that] persist for at least several months, for more days than not*”. Therefore, any item developed to measure this symptom needs to capture the nature of the experience (worry about multiple everyday events), its intensity (excessive worry), and its duration (more days than not, persisting for months). Sometimes all of these important aspects cannot be captured by a single item in a self-report questionnaire, increasing the likelihood of **‘false-positive’ endorsements. The risk of these types of false positives can be reduced by using follow-up checks or clarifications about the clinical relevance of the response; traditionally these ‘clinical checks’ have only been embedded within clinician-administered interviews. However, interviews are time consuming, costly, and impractical in many research and clinical settings.**

Shevlin et al. [6] introduced the concept of ‘clinical checks’ within self-report questionnaires. Clinical checks are follow-up questions to scale items that check whether respondents understood the intended clinical meaning, intensity, or duration elements. Clinical checks were intended to increase confidence in prevalence estimates derived from self-report measures by reducing the likelihood of false positive cases. In a ‘proof of principle’ study with the International Grief Questionnaire [7]—a self-report measure of ICD-11 Prolonged Grief Disorder (PGD)—Shevlin et al. reported that clinical checks led to decreases in symptom endorsements ranging from 10.8% to 53.6%, and there was a 24.8% relative reduction in the proportion of people who screened positive for PGD (from 13.6% to 10.2%).

It was proposed that clinical checks could be embedded in other measures, and so this study was planned to develop and test the use of clinical checks in the International Trauma Questionnaire (ITQ) [8], a widely used self-report measure of ICD-11 posttraumatic stress disorder (PTSD) and complex PTSD (CPTSD). Consistent with Shevlin et al.’s [6] findings, it was hypothesised that the application of the clinical checks would lead to statistically significant reductions in individual symptom endorsements, symptom cluster endorsements, and overall prevalence estimates of PTSD and CPTSD.

**Aims of the study**

The study sought to evaluate the implementation of clinical checks in the ITQ using data from a non-probability quota-based representative sample of adults in the United Kingdom.

**Methods**

*Procedures and participants*

An *a priori* power analysis was performed to determine the appropriate sample size needed to detect a disorder with a 5% population prevalence rate (assumed to be the most conservative estimate of the prevalence of PTSD in the United Kingdom [UK] population [9]), with a 99% confidence level, and a 2% margin of error. This resulted in a necessary sample size of 782. Participants (*N* = 975) were gathered by Qualtrics Panel Services from March 1-27, 2024. Qualtrics partners with dozens of UK-based research panel providers to recruit participants from a large pool of potential participants, and prior research shows that these samples are highly representative of target populations [e.g., 10, 11], including the general adult population of the UK [12]. Quota sampling was used to construct a sample that was representative of the general adult population of the UK in terms of sex, age, nationality (i.e., England, Scotland, Wales, and Northern Ireland), and income level. Potential participants were contacted by Qualtrics via email or in-app notification. Participants provided consent to participate, and ethical approval was granted by the Social Research Ethics Committee at Maynooth University (ref: SRESC-2023-37628). Multiple attention checks were used throughout the survey, and Qualtrics employs different methods to ensure valid responses such as use of CAPTHCHA technology to prevents bot access and removal of responses from duplicate IP addresses, those with suspicious patterns of responding, and those deemed to have completed the survey too quickly. All participants passed all of these attention and quality control checks. The sociodemographic details about the sample are presented in Table 1.

Table 1 here

*Measures*

*Trauma Exposure*

The International Trauma Exposure Measure [ITEM:13] assesses lifetime exposure to 21 potentially traumatic events in a manner consistent with the ICD-11’s definition of trauma (i.e., any event that is extremely threatening or horrific). The ITEM contains descriptions of events that are traditionally regarded as traumatic (e.g., physical assault, sexual assault, exposure to war) as well as events that are regarded as traumatic by the ICD-11’s broader definition (e.g., bullying, stalking, emotional abuse, neglect), and these can be seen in Table 3. Participants indicated on a ‘Yes’ (1) or ‘No’ (0) basis if they had experienced each event in their lifetime such that scores can range from 0 to 21 with higher scores indicating exposure to more traumatic life events. Participants were also asked to identity their most distressing traumatic event, and how long ago it occurred.

*ICD-11 PTSD and CPTSD*

The ITQ [8] is an 18-item self-report measure of all diagnostic requirements for ICD-11 PTSD and CPTSD. Six items measure the different PTSD and DSO symptoms, respectively, and each symptom cluster (re-experiencing, avoidance, sense of threat, affective dysregulation, negative self-concept, and disturbed relationships) is measured by two items. Three items measure functional impairments related to the PTSD and DSO symptoms separately. Participants completed the PTSD items with respect to how bothered they have been by each symptom over the past month, and the DSO symptoms in terms of typical reactions. All items use a five-point Likert scale (0 = *Not at all*, 4 = *Extremely*), and responses of 2 (*Moderately*) or higher indicate that the symptom is present. There is considerable empirical support for the reliability and validity of the ITQ scores [14], and the internal reliability of the PTSD (α = .88) and DSO (α = .90) scale scores in this sample were acceptable.

*Development of the ITQ clinical checks*

A team of six researchers developed the clinical checks for the ITQ. The team included academic researchers in clinical psychology (MC, TK, CB) and psychological measurement (MS, PH, ER), and most were part of the original ITQ development and validation working group. The development of the clinical checks took place over three phases.

Phase 1 involved an initial meeting to discuss the viability and potential utility of clinical checks in the ITQ. It was agreed that each team member would draft at least one clinical check for each item, and a subsequent meeting would be convened to review, discuss, and agree on the optimal check to be used for each item. To ensure that the final ITQ with clinical checks was still quick and easy to complete and score, it was agreed that there should be one check for each item. Team members were asked to develop the clinical checks based on a set of principles. First, each check should aim to reduce the likelihood of inappropriate endorsements by ensuring that participants responded to the intended clinically relevant meaning, intensity, or duration component of the item. Second, each check should be written in a way that leads to a ‘Yes’ or ‘No’ response; the rationale being that symptoms need to be deemed to be present or absent for diagnostic purposes. Third, the checks should be easily understood. Each member of the team was provided with a copy of the ITQ, and a copy of the ICD-11 description and diagnostic requirements for PTSD (6B40) and CPTSD (6B41) from the ICD-11 website.

Phase 2 involved another meeting with the aim of selecting a clinical check for each item. The process involved sequentially reviewing and discussing the checks proposed by each team member, and selecting one considered to be the best at ensuring the clinical relevance of the symptom was being elucidated in terms of meaning, intensity, or duration. Agreement was reached on selecting a single check for ten of the 12 ITQ symptom items, while two checks were retained for the outstanding two items due to lack of consensus as to which item was optimal (these items were those measuring numbing and feeling cutoff from others). It was agreed that the choice of which check to be included in the final version would be based on comparing the responses from the survey data and the check that produced the largest decrease in item endorsement would be retained. This is in keeping with the overall premise of the clinical checks which is to reduce the likelihood of false positive responses.

Phase 3 involved the collation of the checks and the production of a draft ITQ with clinical checks (ITQ-CC) for inclusion in the survey. It was agreed that the clinical checks would only be presented when participants responded to the ITQ items with a score of 2 (*Moderately*) or higher on the Likert scale, which corresponds to the symptom being ‘present’. During this final meeting the team discussed the potential of applying a clinical check to the functional impairment items. This was not something that had been pre-planned and the idea emerged from discussion. The ITQ items and the associated clinical checks, along with a rationale for each, are presented in Table 2. A copy of the final measure is provided in Appendix 1.

Table 2 here

*Data analysis plan*

Summary statistics for trauma exposure were calculated. Then, we calculated the symptom, symptom cluster, and disorder prevalence estimates with and without the use of the clinical checks. Percentage decreases were calculated using the following formula: (Endorsement% - CC% / Endorsement%) \* 100. Statistical comparisons of proportions meeting symptom, symptom cluster, and disorder requirements were made using McNemar’s Z-test which is appropriate for comparing paired-sample proportions.

**Results**

*Trauma-related characteristics*

In total, 72.5% (*n* = 707) of participants were exposed to at least one traumatic life event, and the mean number of lifetime traumatic events was 3.69 (*SD* = 4.03; *Mdn* = 3.00). Exposure rates to each traumatic event are displayed in Table 3 and ranged from 3.2% (‘caused extreme suffering or death to another person’) to 41.7% (‘a loved diagnosed with a life-threatening illness or experienced a life-threatening accident’). The events most commonly identified as being most distressing were having a loved one die in an awful manner (14.5%; *n* = 141), learning of a loved one being diagnosed with a life-threatening illness or involved in a life-threatening accident (14.3%; *n* = 139), and being repeatedly bullied either online or in person (5.4%; *n* = 53).

*Item responses and endorsement rates*

Table 4 presents the ITQ symptom endorsement rates with and without the clinical checks as well as the percentage decreases associated with use of the clinical checks. Symptom endorsements *without the clinical checks* ranged from 23.9% (feel worthless) to 35.6% (difficulty calming down) whereas endorsements *with the clinical checks* ranged from 15.0% (nightmares) to 26.4% (difficulty calming down). Additionally, the PTSD functional impairment endorsement dropped from 27.4% to 19.7%, and the DSO functional impairment endorsement dropped from 28.9% to 20.9%. Thus, the *percentage decreases* due to the clinical checks ranged from 18.0% (feel like a failure) to 43.9% (hyperalert), and all decreases were statistically significant (*p* < .001).

Regarding the two ITQ items for which there were two clinical checks trialled, the percentage decreases were 32.9% and 26.7% for the checks related to the ‘emotional numbing’ symptom, and 19.2% and 26.0% for the checks related to the ‘feeling cut-off from others’ symptom. Consistent with our pre-set rule to select the check that led to the largest decrease in symptom endorsement, all subsequent analyses are based on use of the more stringent checks for these items. Supplementary Materials Table 1 includes the finalized ITQ with clinical checks.

Table 4 here

Table 5 presents the proportions meeting the symptom cluster requirements with and without the clinical checks. Percentage decreases ranged from 19.1% (Avoidance) to 35.9% (Sense of Threat) and all decreases were statistically significant (*p* < .001).

Table 5 here

At the disorder level, 5.4% (*n* = 53) met requirements for PTSD without the clinical checks, and this dropped to 3.8% (*n* = 37) with the clinical checks (McNemar’s Z = 2.17, *p* < .001; relative decrease = 29.6%). Moreover, 9.5% (*n* = 93) met requirements for CPTSD without the clinical checks, and this dropped to 4.9% (*n* = 48) with the clinical checks (McNemar’s Z = 6.56, *p* < .001; relative decrease = 48.4%). Consequently, 14.9% (*n* = 146**)** met diagnostic requirements for either PTSD or CPTSD without the clinical checks, while 8.7% (*n* = 85) met requirements for either disorder with the clinical checks (McNemar’s Z = 7.68, *p* < .001; relative decrease = 41.6%).

**Discussion**

The purpose of this study was to describe the process of developing clinical checks for the ITQ and testing their effect in a general population sample. Our results showed that the clinical checks had the intended effects of reducing symptom endorsements, and by extension, estimated rates of disorder prevalence. Reductions in individual symptoms with the clinical checks were quite substantial, ranging from approximately 18% to 44%. If one takes seriously the view that the clinical checks operate to remove probable type 1 errors in symptom endorsement, then these findings suggest that such errors are common for all items. One interesting observation was that there was more variability in symptom reductions within the PTSD clusters than within the DSO clusters. As a salient example, the percentage decreases for the two sense of threat symptoms were 24.9% and 43.9% whereas the percentage decreases for the two negative self-concept were 18.0% and 21.8%. It is difficult to say why this effect occurred but there are at least two possibilities. One is that some of the PTSD symptom items were more ambiguous than others and the clinical checks were operating successfully to correct this ambiguity, and the other is that some of the clinical checks for the PTSD items were operating more successfully than others at elucidating the intended clinical meaning, intensity, or duration elements of the symptom item. It will be interesting to monitor future research with the ITQ clinical checks to determine if this is a replicable result.

An important feature of the ITQ is the formal assessment of functional impairment related to both the PTSD and DSO symptoms. It is important to ensure adequate assessment of functional impairment not only because it is a diagnostic requirement for both disorders, but because research shows that while clinicians are primarily interested in assessing symptoms, patients are more focussed on the problems caused by the symptoms [15]. Supplementing the functional impairment items in the ITQ with a clinical check led to considerable decreases (approximately 28%) in endorsement for PTSD and DSO related impairment. These decreases suggest that the original ITQ functional impairment items may not sufficiently convey the requirement that these are serious and ongoing disruptions to normal daily routines. The importance of considering effective assessment of functional impairment can hardly be understated given its centrality in establishing the presence of disorder. As such, all measures of psychopathology (trauma-related or otherwise) should include a measure of functional impairment, and perhaps all scale developers should give more consideration as to how to screen for impairment most effectively.

At the diagnostic level, the proportion of people meeting requirements for PTSD or CPTSD dropped by 41.6% (i.e., from 14.9% to 8.7%) when the clinical checks were used. The best estimates of the general population prevalence rate of PTSD are generally considered to come from studies that use large, stratified, random probability-based samples of the general population and assess PTSD using standardized, structured, diagnostic interviews [9]. Studies like this in English-speaking nations like the UK and the United States find that somewhere between 5-8% of the population probably have PTSD. Thus, the ITQ with clinical checks in this study generated a similar overall prevalence rate as would be expected when using structured interview methods. More research will obviously be needed but this raises the exciting possibility that the addition of simple clinical checks to a standard self-report measure might reasonably emulate the results of more time-consuming and costly interview-based methods of assessment.

One imperfect way of putting the decreases observed in this study into some context is by comparing them to the differences observed between self-report measures and clinical interviews (however it should be clearly noted that the clinical checks are not meant to emulate a clinical interview). Gelezelyte et al. [16] compared endorsements between the ITQ and the International Trauma Interview [ITI:17] which is a clinician-administered diagnostic interview for ICD-11 PTSD and CPTSD. PTSD symptom endorsements were lower for the ITI, with percentage differences of 22.2% for re-experiencing, 16.6% for avoidance, and 36.1% for sense of threat, similar to the clinical checks in this study (30.8%, 19.1%, and 35.9%, respectively). Moreover, DSO symptom cluster endorsements were lower for the ITI with percentage differences of 37.4% for affective dysregulation, 45.7% for negative self-concept, and 45.6% for disturbed relationships. The impact of the clinical checks for the DSO symptoms was generally smaller (affective dysregulation 24.0%, negative self-concept 19.5%, disturbed relationships 23.4%). Overall, the percentage decreases observed for the clinical checks are similar to the percentage decreases observed for the ITI relative to the ITQ.

In another study, Kramer et al. [18] compared self-reported symptoms of DSM-5 PTSD using the PCL-5 with those from the CAPS-5 interview. The authors highlighted what they called ‘false alarms’ which were symptoms considered present based on responses to the PCL-5 but absent based on CAPS-5 assessments. This is not perfectly analogous to the ‘failing’ of a clinical check, but it indicates that the initial response to a self-report item was not supported when additional information was obtained via clinical interview. The ITQ false alarms (calculated as ‘Endorsement’ minus ‘Endorsement + clinical check’) were lower than those reported by Kramer et al. for the re-experiencing (Nightmares/ Flashbacks: PCL = 8.3%/ 13.3%, ITQ = 9.8%/ 7.2%), avoidance (Internal/ External avoidance: PCL = 21.7%/33.3%, ITQ = 5.2%/8.5%), and sense of threat (Hyperalert/Hyperarousal: PCL =18.3%, 25.0%, ITQ =14.4%, 6.2%) symptoms. The false positives might be lower for the clinical checks than the clinical interview because the interview is more stringent. However, this shows that for all symptoms, across all clusters, there is evidence to suspect that initial responses to self-report items may generate false positive endorsements (if the CAPS-5 was considered the correct response), and that follow-up questions (e.g., clinical checks) can identify these cases.

The generally smaller decreases for the DSO symptoms relative to the PTSD symptoms was, upon reflection, somewhat unexpected. The PTSD items describe experiences that are inherently distressing (e.g., nightmares), are related to the traumatic experience (e.g., avoiding external reminders of the event), or are inherently uncomfortable (e.g., hyperarousal). On the other hand, the DSO items describe feelings and thoughts that are likely to be unpleasant, but not necessarily always distressing and indicative of psychopathology. Experiencing interpersonal disconnection, feelings of low self-worth, or emotional regulation difficulties, for example, are within the normal range of human experiences and only constitute being symptoms of psychopathology when they are associated with considerable distress and impairment. With the data at hand there is no way to explain why the clinical checks produced larger decrease in the PTSD symptoms; maybe the DSO items clearly indicate the clinical aspects of the symptoms and so require less ‘checking’, or maybe the checks for the DSO symptoms are not as good as those for PTSD at screening out non-clinical cases. One of the drawbacks of the current study design was that we could not ask people why they said ‘No’ to the clinical check. This will be an important question to address in future studies.

There are some limitations with this study that should be noted. The non-probability-based nature of the sample limits the generalizability of the findings to the entire UK population, and it is also unknown whether these results will generalize to clinical samples. Symptom and endorsements rates are likely to be considerably higher within clinical populations so it will be important to determine what effect the clinical checks have in this context. Additionally, we could not assess any of the participants with a clinical interview to evaluate concordance between interview assessments and the ITQ with clinical checks. This will be an interesting area for study, but as we have already noted, the clinical checks are not intended to emulate a clinical interview. Finally, we don’t know anything about who failed to pass the clinical checks and why. This will a key focus of future research.

In conclusion, this study provides initial evidence of the effect of using clinical checks within a popular measure of ICD-11 PTSD and CPTSD. For the longest time, researchers and clinicians interested in assessing psychiatric disorders had a choice between self-report questionnaires and clinician-administered diagnostic interviews. These methods have their respective strengths and weaknesses [19], but we believe the approach described in this study – the addition of clinical checks within self-report measures – offers another option that captures many of the greatest strengths of these existing approaches.

**References**

1. Newson JJ, Hunter D, Thiagarajan TC. The heterogeneity of mental health assessment. Frontiers in Psychiatry. 2020;11. doi:10.3389/fpsyt.2020.00076
2. Fenn J, Tan CS, George S. Development, validation and translation of psychological tests. BJPsych Advances. 2020;26(5):306-315. doi:10.1192/bja.2020.33
3. Hinterbuchinger B, Mossaheb N. Psychotic-like experiences: A challenge in definition and assessment. Front Psychiatry. 2021;12:582392. doi:10.3389/fpsyt.2021.582392
4. Zimmerman M. The value and limitations of self‐administered questionnaires in clinical practice and epidemiological studies. World Psychiatry. 2024;23(2):210-212. doi:10.1002/wps.21191
5. International Classification of Diseases, Eleventh Revision (ICD-11), World Health
6. Shevlin M, Hyland P, Cloitre M, et al. Assessing self‐reported prolonged grief disorder with “clinical checks”: A proof of principle study. Journal of Traumatic Stress. Published online August 19, 2024. doi:10.1002/jts.23100
7. Hyland P, Redican E, Karatzias T, Shevlin M. The International Grief Questionnaire (IGQ): A new measure of ICD‐11 prolonged grief disorder. Journal of Traumatic Stress. 2023;37(1):141-153. doi:10.1002/jts.22986
8. Cloitre M, Shevlin M, Brewin CR, et al. The International Trauma Questionnaire: development of a self‐report measure of ICD‐11 PTSD and complex PTSD. Acta Psychiatrica Scandinavica. 2018;138(6):536-546. doi:10.1111/acps.12956
9. McManus S, Bebbington P, Jenkins R, Brugha T. (eds.) (2016) Mental health and wellbeing in England: Adult Psychiatric Morbidity Survey 2014. Leeds: NHS Digital.
10. Belliveau J, Soucy KI, Yakovenko I. The validity of qualtrics panel data for research on video gaming and gaming disorder. Experimental and Clinical Psychopharmacology. 2022;30(4):424-431. doi:10.1037/pha0000575
11. Boas TC, Christenson DP, Glick DM. Recruiting large online samples in the United States and India: Facebook, Mechanical Turk, and Qualtrics. Political Science Research and Methods. 2018;8(2):232-250. doi:10.1017/psrm.2018.28.
12. McBride O, Murphy J, Shevlin M, et al. Monitoring the psychological, social, and economic impact of the COVID-19 pandemic in the population: Context, design and conduct of the longitudinal COVID-19 Psychological Research Consortium (C19PRC) Study. Int J Methods Psychiatr Res. 2021;30(1)doi:10.1002/mpr.1861
13. Hyland P, Karatzias T, Shevlin M, et al. Does requiring trauma exposure affect rates of ICD-11 PTSD and complex PTSD? Implications for DSM–5. Psychological Trauma Theory Research Practice and Policy. 13(2):133-141. doi:10.1037/tra0000908
14. Redican E, Nolan E, Hyland P, et al. A systematic literature review of factor analytic and mixture models of ICD-11 PTSD and CPTSD using the International Trauma Questionnaire. J Anxiety Disord. 2021;79:102381.
15. Weiss MD. A paradigm for targeting functional impairment as an outcome in Attention-Deficit/Hyperactivity Disorder. Brain Sciences. 2022;12(8):1014. doi:10.3390/brainsci12081014
16. Gelezelyte O, Roberts NP, Kvedaraite M, et al. Validation of the International Trauma Interview (ITI) for the clinical assessment of ICD-11 Posttraumatic Stress Disorder (PTSD) and Complex PTSD (CPTSD) in a Lithuanian sample. European Journal of Psychotraumatology. 2022;13(1). doi:10.1080/20008198.2022.2037905
17. Roberts, N. P., Cloitre, M., Bisson, J., & Brewin, C. R. (2019). International trauma interview (ITI) for ICD- 11 PTSD and complex PTSD (Test Version 3.2)
18. Kramer LB, Whiteman SE, Petri JM, Spitzer EG, Weathers FW. Self-Rated versus Clinician-Rated Assessment of Posttraumatic Stress Disorder: An evaluation of discrepancies between the PTSD checklist for DSM-5 and the Clinician-Administered PTSD Scale for DSM-5. Assessment. 2022;30(5):1590-1605. doi:10.1177/10731911221113571
19. Hyland P, Shevlin M. Clinician-administered interviews should not be considered the ‘gold standard’ method of assessing psychological distress. New Ideas in Psychology. 2023;73:101072. doi:10.1016/j.newideapsych.2023.101072

**Table 1**

*Sociodemographic details for the sample (N = 975).*

|  |  |  |
| --- | --- | --- |
|  | n | % |
| **Sex** |  |  |
| Male | 473 | 48.5 |
| Female | 502 | 51.5 |
| **Age** |  |  |
| 18-24 | 114 | 11.7 |
| 25-34 | 191 | 19.6 |
| 35-44 | 182 | 18.7 |
| 45-54 | 164 | 16.8 |
| 55-64 | 133 | 13.6 |
| 65+ | 191 | 19.6 |
| **Born in UK** | 871 | 89.3 |
| **Region of UK** |  |  |
| England | 842 | 86.4 |
| Wales | 48 | 4.9 |
| Scotland | 66 | 6.8 |
| Northern Ireland | 19 | 1.9 |
| **Annual Income** |  |  |
| Less than £20,000 | 263 | 27.0 |
| £20,000-£39,999 | 336 | 34.5 |
| £40,000-£59,999 | 190 | 19.5 |
| £60,000-£79,999 | 101 | 10.4 |
| £80,000-£99,999 | 50 | 5.1 |
| More than £100,000 | 35 | 3.6 |
| **Highest Education** |  |  |
| No Qualification | 39 | 4.0 |
| O-level / GCSE or similar | 247 | 25.3 |
| A-level or similar | 278 | 28.5 |
| Undergraduate Degree | 282 | 28.9 |
| Postgraduate Degree | 129 | 13.2 |
| **Employment Status** |  |  |
| Full-time employed | 447 | 45.8 |
| Part-time employed | 170 | 17.4 |
| Unemployed, seeking work | 51 | 5.2 |
| Unemployed, not seeking work | 45 | 4.6 |
| Not working due to disability | 49 | 5.0 |
| Student | 30 | 3.1 |
| Retired | 183 | 18.8 |
| **Relationship Status** |  |  |
| In a committed relationship | 694 | 71.2 |
| Not in a committed relationship | 281 | 28.8 |
| **Children** |  |  |
| 0 | 345 | 35.4 |
| 1 | 228 | 23.4 |
| 2 | 248 | 25.4 |
| 3 | 109 | 11.2 |
| 4 or more | 45 | 4.6 |

**Table 2**

*Original ITQ items, clinical checks, and rationale.*

|  |  |  |
| --- | --- | --- |
| **ITQ PTSD** | Clinical check | Rationale |
| 1. Having upsetting dreams that replay part of the experience or are clearly related to the experience? | Does this happen frequently; at least two times in the last month? | Establishes that nightmares occur regularly enough to be of clinical relevance. |
| 2. Having powerful images or memories that sometimes come into your mind in which you feel the experience is happening again in the here and now? | Do you feel like you are actually reliving the event, even if only for a moment? | Ensures that the ‘here and now’ element of the flashback is present, and endorsement is not just of an intrusive memory. |
| 3. Avoiding internal reminders of the experience (for example, thoughts, feelings, or physical sensations)? | Do you actively try to push these thoughts out of your mind? | Emphasises the deliberate and effortfulness nature of the avoidance. |
| 4. Avoiding external reminders of the experience (for example, people, places, conversations, objects, activities, or situations)? | Have you only started avoiding them since the traumatic experience? | Ensures that the avoidance behaviours are directly related to the traumatic event. |
| 5. Being “super-alert”, watchful, or on guard? | Do you regularly feel in danger or that something bad is about to happen in certain situations? | Emphasises the ongoing and pervasive nature of the cognitive-emotional element of sense of threat. |
| 6. Feeling jumpy or easily startled? | Something normal, like a noise, can shock and set your heart racing – something that doesn’t bother other people. Does this happen to you? | Emphasises physiological reactivity and establishes clinical relevance through comparison with other people’s reactions. |
| **ITQ DSO** | **Clinical check** | **Rationale** |
| When I am upset, it takes me a long time to calm down. | Do you notice that you get upset more easily than others, *and* have more intense reactions, *and* it takes you longer to calm down compared to other people? | Establishes clinical relevance by ensuring this problem is persistent, pervasive, and more extreme than what is observed in others. |
| I feel numb or emotionally shut down. | This means being unable to experience emotions such as joy, sadness, excitement, and anger. Is this true for you? | Clarifies meaning and establishes that emotional flattening occurs across a variety of emotions. |
|  | Do you often shut down when you are overwhelmed? | Establishes that this is a frequently occurring problem with emotions. |
| I feel like a failure. | This does not mean just occasionally feeling bad about yourself. It means consistently viewing yourself as inferior. Is this how you think about yourself? | Emphasises the ongoing and severe nature of the negative self-concept. Ensures differentiation for normal and occasional negative thoughts about the self. |
| I feel worthless. | Some people believe they are unworthy and unimportant. Is this how you feel about yourself? | Ensures accurate understanding of the meaning of this problem. |
| I feel distant or cut off from people. | This means feeling like other people do not, and cannot, understand you. Is this true for you? | Emphasises the psychological nature of feeling disconnected from other people in general. |
|  | This means you cannot or do not want to develop strong bonds with other people? Is this true for you? | Emphasises the behavioural element of feeling disconnected from other people in general. |
| I find it hard to stay emotionally close to people. | This means fear of conflict or of being rejected if you get close to others. Is this true for you? | Establishes the clinical meaning of this problem which is fear of rejection for other people. |
| **Functional Impairment** |  |  |
| In the past month, have any of these problems affected your relationships or social life? Your work or ability to work? Any other important part of your life such as parenting, or college work, or other important activities? | These questions were about serious and ongoing disruptions in your life; not being able to do the things that you want to do, or things that people normally expect you to do. Do you think that the disruptions are serious and have a negative impact on you? | Emphasizes the severe and pervasive nature of the impact of the problems on functioning. |

**Table 3**

*Exposure to each traumatic event on the International Trauma Exposure Measure (N = 975).*

|  |  |  |
| --- | --- | --- |
|  | n | % |
| Diagnosed with a life-threatening illness. | 128 | 13.1 |
| Someone close to you died in an awful manner. | 299 | 30.7 |
| Someone close to you was diagnosed with a life-threatening illness or experienced a life-threatening accident. | 407 | 41.7 |
| Someone threatened your life with a weapon (knife, gun, bomb etc.) | 149 | 15.3 |
| Physically assaulted (punched, kicked, slapped, mugged, robbed etc.) by a parent or guardian. | 155 | 15.9 |
| Physically assaulted (punched, kicked, slapped, mugged, robbed etc.) by someone other than a parent or guardian. | 275 | 28.2 |
| Sexually assaulted (rape, attempted rape, or forced sex acts) by a parent or guardian. | 51 | 5.2 |
| Sexually assaulted (rape, attempted rape, or forced sex acts) by someone other than a parent or guardian. | 151 | 15.5 |
| Sexually harassed (received other types of unwanted sexualized comments or behaviours). | 219 | 22.5 |
| Exposed to war or combat (as a soldier or as a civilian). | 49 | 5.0 |
| Held captive and/or tortured. | 37 | 3.8 |
| You caused extreme suffering or death to another person. | 31 | 3.2 |
| Witnessed another person experiencing extreme suffering or death. | 178 | 18.3 |
| Involved in an accident (e.g., transportation, work, home, leisure) where your life was in danger. | 116 | 11.9 |
| Natural disaster (e.g., hurricane, tsunami, earthquake) where your life was in danger. | 59 | 6.1 |
| Human-made disaster (e.g., terrorist attack, chemical spill, public shooting) where your life was in danger. | 58 | 5.9 |
| Another person stalked you. | 131 | 13.4 |
| You were repeatedly bullied (online or offline). | 294 | 30.2 |
| You were repeatedly humiliated, put down, or insulted by another person. | 291 | 29.8 |
| You were repeatedly made to feel unloved, unwelcome, or worthless. | 298 | 30.6 |
| You were repeatedly neglected, ignored, rejected, or isolated. | 217 | 22.3 |

**Table 4.**

Frequency of ITQ Symptom Cluster Endorsement and Clinical Checks (CC) (N = 975)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Endorsement | | Endorsement + CC | | Decreases in cases | |  |
|  | N | % | N | % | N | % | McNemar’s Z |
| ***PTSD scale*** |  |  |  |  |  |  |  |
| Nightmares | 247 | 25.3 | 146 | 15.0 | 101 | 40.7 | 10.05\* |
| Flashbacks | 242 | 24.8 | 172 | 17.6 | 70 | 29.0 | 8.37\* |
| Internal avoidance | 281 | 28.8 | 230 | 23.6 | 51 | 18.1 | 7.14\* |
| External avoidance | 268 | 27.5 | 185 | 19.0 | 83 | 30.9 | 9.11\* |
| Hyperalert | 320 | 32.8 | 179 | 18.4 | 41 | 43.9 | 11.87\* |
| Hyperarousal | 243 | 24.9 | 182 | 18.7 | 61 | 24.9 | 7.81\* |
| Functional impairment | 267 | 27.4 | 192 | 19.7 | 75 | 28.1 | 8.66\* |
| ***DSO scale*** |  |  |  |  |  |  |  |
| Difficulty calming down | 347 | 35.6 | 257 | 26.4 | 90 | 25.8 | 9.49\* |
| Numbing | 285 | 29.2 | 191 | 19.6a | 94 | 32.9a | 9.70\* |
|  |  |  | 209 | 21.4b | 76 | 26.7b | 8.72\* |
| Feel like a failure | 249 | 25.5 | 204 | 20.9 | 45 | 18.0 | 6.71\* |
| Feel worthless | 233 | 23.9 | 182 | 18.7 | 51 | 21.8 | 7.14\* |
| Feel cut off from others | 274 | 28.1 | 221 | 22.7a | 53 | 19.2a | 7.28\* |
|  |  |  | 203 | 20.8b | 71 | 26.0b | 8.43\* |
| Difficult close to others | 271 | 27.8 | 209 | 21.4 | 62 | 23.0 | 7.87\* |
| Functional impairment | 282 | 28.9 | 204 | 20.9 | 78 | 27.7 | 8.83\* |

Note: \* = all Z-values are statistically significant at *p* < .001; a = Clinical check 1 for this item, b = clinical check 2 for this item.

**Table 5.**

Frequency of ITQ Symptom Cluster Endorsement and Clinical Checks (CC) (N = 975)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Endorsement | | Endorsement + CC | | Decrease in cases | | McNemar’s Z |
|  | N | % | N | % | N | % |  |
| Re-experiencing in the here and now | 320 | 32.8 | 221 | 22.7 | 99 | 30.8 | 9.95\* |
| Avoidance | 353 | 36.2 | 286 | 29.3 | 67 | 19.1 | 8.19\* |
| Sense of threat | 367 | 37.6 | 235 | 24.1 | 132 | 35.9 | 11.49\* |
| PTSD Functional Impairment | 267 | 27.4 | 192 | 19.7 | 75 | 28.1 | 8.66\* |
| Affective dysregulation | 418 | 42.9 | 318 | 32.6 | 100 | 24.0 | 10.00\* |
| Negative self-concept | 295 | 30.3 | 238 | 24.4 | 57 | 19.5 | 7.55\* |
| Disturbed relationships | 350 | 35.9 | 268 | 27.5 | 82 | 23.4 | 9.06\* |
| DSO Functional Impairment | 282 | 28.9 | 204 | 20.9 | 78 | 27.7 | 8.83\* |

Note: \* = all Z-values are statistically significant at *p* < .001

**Appendix 1:** The International Trauma Questionnaire with Clinical Checks

**International Trauma Questionnaire with Clinical Checks**

**Instructions:** Please answer the following questions thinking about the traumatic event you previously identified as most distressing [respondents should have been screened for trauma prior to the administration of this scale]. Below are several problems that people sometimes report in response to traumatic or stressful life events. Please read each item carefully, then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Not at all** | **A little bit** | **Moderately** | **Quite a bit** | **Extremely** |
| P1. Having upsetting dreams that replay part of the experience or are clearly related to the experience? | 0 | 1 | 2 | 3 | 4 |
| If scored 2 or higher, please answer: Does this happen frequently; at least two times in the last month? | | | Yes No | | |
| P2. Having powerful images or memories that sometimes come into your mind in which you feel the experience is happening again in the here and now? | 0 | 1 | 2 | 3 | 4 |
| If scored 2 or higher, please answer: Do you feel like you are actually reliving the event, even if only for a moment? | | | Yes No | | |
| P3. Avoiding internal reminders of the experience (for example, thoughts, feelings, or physical sensations)? | 0 | 1 | 2 | 3 | 4 |
| If scored 2 or higher, please answer: Do you actively try to push these thoughts out of your mind? | | | Yes No | | |
| P4. Avoiding external reminders of the experience (for example, people, places, conversations, objects, activities, or situations)? | 0 | 1 | 2 | 3 | 4 |
| If scored 2 or higher, please answer: Have you only started avoiding them since the traumatic experience? | | | Yes No | | |
| P5. Being “super-alert”, watchful, or on guard? | 0 | 1 | 2 | 3 | 4 |
| If scored 2 or higher, please answer: Do you regularly feel in danger or that something bad is about to happen in certain situations? | | | Yes No | | |
| P6. Feeling jumpy or easily startled? | 0 | 1 | 2 | 3 | 4 |
| If scored 2 or higher, please answer: Something normal, like a noise, can shock and set your heart racing – something that doesn’t bother other people. Does this happen to you? | | | Yes No | | |
| ***In the past month have the above problems:*** | | | | | |
| P7. Affected your relationships or social life? | 0 | 1 | 2 | 3 | 4 |
| P8. Affected your work or ability to work? | 0 | 1 | 2 | 3 | 4 |
| P9. Affected any other important part of your life such as parenting, or school or college work, or other important activities? | 0 | 1 | 2 | 3 | 4 |
| If P7, P8 or P9 scored 2 or higher, please answer: These questions were about serious and ongoing disruptions in your life; not being able to do the things that you want to do, or things that people normally expect you to do. Do you think that the disruptions are serious and have a negative impact on you? | | | Yes No | | |

**Instructions:** Below are problems that people who have had stressful or traumatic events sometimes experience. The questions refer to ways you typically feel, ways you typically think about yourself, and ways you typically relate to others. Answer the following thinking about how true each statement is of you.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***How true is this of you?*** | **Not at all** | **A little bit** | **Moderately** | **Quite a bit** | **Extremely** |
| C1. When I am upset, it takes me a long time to calm down. | 0 | 1 | 2 | 3 | 4 |
| If scored 2 or higher, please answer: Do you notice that you get upset more easily than others, *and* have more intense reactions, *and* it takes you longer to calm down compared to other people? | | | Yes No | | |
| C2. I feel numb or emotionally shut down. | 0 | 1 | 2 | 3 | 4 |
| If scored 2 or higher, please answer: This means being unable to experience emotions such as joy, sadness, excitement, and anger. Is this true for you? | | | Yes No | | |
| C3. I feel like a failure. | 0 | 1 | 2 | 3 | 4 |
| If scored 2 or higher, please answer: This does not mean just occasionally feeling bad about yourself. It means consistently viewing yourself as inferior. Is this how you think about yourself? | | | Yes No | | |
| C4. I feel worthless. | 0 | 1 | 2 | 3 | 4 |
| If scored 2 or higher, please answer: Some people believe they are unworthy and unimportant. Is this how you feel about yourself? | | | Yes No | | |
| C5. I feel distant or cut off from people. | 0 | 1 | 2 | 3 | 4 |
| If scored 2 or higher, please answer: This means you cannot or do not want to develop strong bonds with other people? Is this true for you? | | | Yes No | | |
| C6. I find it hard to stay emotionally close to people. | 0 | 1 | 2 | 3 | 4 |
| If scored 2 or higher, please answer: The means fear of conflict or of being rejected if you get close to others. Is this true for you? | | | Yes No | | |
| ***In the past month, have the above problems in emotions, in beliefs about yourself and in relationships:*** | | | | | |
| C7. Created concern or distress about your relationships or social life? | 0 | 1 | 2 | 3 | 4 |
| C8. Affected your work or ability to work? | 0 | 1 | 2 | 3 | 4 |
| C9. Affected any other important parts of your life such as parenting, or school or college work, or other important activities? | 0 | 1 | 2 | 3 | 4 |
| If C7, C8 or C9 2 or higher, please answer: These questions were about serious and ongoing disruptions in your life; not being able to do the things that you want to do, or things that people normally expect you to do. Do you think that the disruptions are serious and have a negative impact on you? | | | Yes No | | |