



Year: 2020

Evidence for the coherence and integrity of the complex PTSD (CPTSD) diagnosis: response to Achterhof et al., (2019) and Ford (2020)

Cloitre, Marylène ; Brewin, Chris R ; Bisson, Jonathan I ; Hyland, Philip ; Karatzias, Thanos ; Lueger-Schuster, Brigitte ; Maercker, Andreas ; Roberts, Neil P ; Shevlin, Mark

Abstract: This letter to the editor responds to a recent EJPT editorial and following commentary which express concerns about the validity of the ICD-11 complex PTSD (CPTSD) diagnosis. Achterhof and colleagues caution that latent profile analyses and latent class analyses, which have been frequently used to demonstrate the discriminative validity of the ICD-11 PTSD and CPTSD constructs, have limitations and cannot be relied on to definitively determine the validity of the diagnosis. Ford takes a broader perspective and introduces the concept of 'cPTSD' which describes a wide ranging set of symptoms identified from studies related to DSM-IV, DSM-V and ICD-11 and proposes that the validity of the ICD-11 CPTSD is in question as it does not address the multiple symptoms identified from previous trauma-related disorders. We argue that ICD-11 CPTSD is a theory-driven, empirically supported construct that has internal consistency and conceptual coherence and that it need not explain nor resolve the inconsistencies of past formulations to demonstrate its validity. We do agree with Ford and with Achterhof and colleagues that no one single statistical process can definitively answer the question of whether CPTSD is a valid construct. We reference several studies utilizing many different statistical approaches implemented across several countries, the overwhelming majority of which have supported the validity of ICD-11 as a unique construct. We conclude with our own cautions about ICD-11 CPTSD research to date and identify important next steps.

DOI: <https://doi.org/10.1080/20008198.2020.1739873>

Other titles: Editorial

Posted at the Zurich Open Repository and Archive, University of Zurich

ZORA URL: <https://doi.org/10.5167/uzh-188269>

Journal Article

Published Version



The following work is licensed under a Creative Commons: Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

Originally published at:

Cloitre, Marylène; Brewin, Chris R; Bisson, Jonathan I; Hyland, Philip; Karatzias, Thanos; Lueger-Schuster, Brigitte; Maercker, Andreas; Roberts, Neil P; Shevlin, Mark (2020). Evidence for the coherence and integrity of the complex PTSD (CPTSD) diagnosis: response to Achterhof et al., (2019) and Ford (2020). *European Journal of Psychotraumatology*, 11(1):1739873.

DOI: <https://doi.org/10.1080/20008198.2020.1739873>



Evidence for the coherence and integrity of the complex PTSD (CPTSD) diagnosis: response to Achterhof et al., (2019) and Ford (2020)

Marylène Cloitre ^{ib a,b}, Chris R. Brewin ^c, Jonathan I. Bisson ^{ib d}, Philip Hyland ^{ib e,f}, Thanos Karatzias ^{ib g,h}, Brigitte Lueger-Schuster ⁱ, Andreas Maercker ^{ib j}, Neil P. Roberts ^{ib k,l} and Mark Shevlin ^{ib m}

^aNational Center for PTSD Dissemination and Training Division, VA Palo Alto Health Care System, Palo Alto, CA, USA; ^bDepartment of Psychiatry and Behavioural Sciences, Stanford University, Stanford, CA, USA; ^cClinical Educational & Health Psychology, University College London, London, UK; ^dSchool of Medicine, Cardiff University, Cardiff, UK; ^eDepartment of Psychology, Maynooth University, Kildare, Ireland; ^fCentre for Global Health, Trinity College Dublin, Dublin, Ireland; ^gNHS Lothian, Rivers Centre for Traumatic Stress, Edinburgh, UK; ^hSchool of Health & Social Care, Edinburgh Napier University, Edinburgh, UK; ⁱUnit of Psychotraumatology, Faculty of Psychology, University of Vienna, Vienna, Austria; ^jDivision of Psychopathology and Clinical Intervention Zurich, University of Zurich, Switzerland; ^kPsychology and Psychological Therapies Directorate, Cardiff & Vale University Health Board, Cardiff, UK; ^lDivision of Psychological Medicine & Clinical Neurosciences, Cardiff University, Cardiff, UK; ^mSchool of Psychology, Ulster University, Derry, Northern Ireland

ABSTRACT

This letter to the editor responds to a recent EJPT editorial and following commentary which express concerns about the validity of the ICD-11 complex PTSD (CPTSD) diagnosis. Achterhof and colleagues caution that latent profile analyses and latent class analyses, which have been frequently used to demonstrate the discriminative validity of the ICD-11 PTSD and CPTSD constructs, have limitations and cannot be relied on to definitively determine the validity of the diagnosis. Ford takes a broader perspective and introduces the concept of 'cPTSD' which describes a wide ranging set of symptoms identified from studies related to DSM-IV, DSM-V and ICD-11 and proposes that the validity of the ICD-11 CPTSD is in question as it does not address the multiple symptoms identified from previous trauma-related disorders. We argue that ICD-11 CPTSD is a theory-driven, empirically supported construct that has internal consistency and conceptual coherence and that it need not explain nor resolve the inconsistencies of past formulations to demonstrate its validity. We do agree with Ford and with Achterhof and colleagues that no one single statistical process can definitively answer the question of whether CPTSD is a valid construct. We reference several studies utilizing many different statistical approaches implemented across several countries, the overwhelming majority of which have supported the validity of ICD-11 as a unique construct. We conclude with our own cautions about ICD-11 CPTSD research to date and identify important next steps.

Carta al editor: Respuesta a Achterhof y cols., (2019) y Ford (2020): Evidencia para la coherencia e integridad del diagnóstico de tept complejo (TEPT-C)

Un reciente artículo de la EJPT comentario editorial y siguiente han manifestado preocupaciones acerca de la validez del diagnóstico de TEPT complejo (TEPT-C) de la CIE-11. Achterhof y colegas argumentan que la validez del TEPT-C requiere más evidencia de la que puede ser otorgada por el análisis de clase latente (ACL) y análisis de perfil latente (APL). Ford toma una visión más amplia proponiendo que la actual conceptualización de TEPT-C no capta el rango completo de síntomas asociados o los individuos que sufren los efectos del trauma y concluye que la actual definición de TEPT-C requiere de una revisión para poder representar un constructo distinto, cohesivo y válido. En esta carta resumimos los datos sustantivos que en total, apoyan la validez del constructo del diagnóstico de TEPT-C e indican la coherencia conceptual y la integridad del TEPT-C como es presentado en la CIE-11. Estamos de acuerdo tanto con Ford como con Achterhof y colegas que la validez para el constructo de TEPT-C debería estar construido sobre la evidencia de distintas metodologías, cuidadosa revisión de cómo el TEPT-C es lo mismo versus diferente de otros trastornos, y evaluación de su valor en la comprensión y tratamiento de los individuos que han experimentado trauma. Concluimos, basados en la evidencia actual de los estudios epidemiológicos, clínicos y de neurociencia que el diagnóstico de TEPT-C de la CIE-11 provee un fundamento científicamente sólido para investigaciones futuras acerca del TEPT complejo.

ARTICLE HISTORY

Received 3 February 2020
Revised 21 February 2020
Accepted 21 February 2020

KEYWORDS

ICD-11; complex PTSD;
CPTSD

PALABRAS CLAVES

TEPT Complejo; Trauma
Complejo; CIE-11

关键词

复杂型PTSD; 复杂型创伤;
ICD-11

致信编辑：回应Achterhof等（2019）和Ford（2020）：复杂型PTSD（CPTSD）诊断的连贯性和完整性的证据

Achterhof和同事（2019）最近发表在EJPT的社论，和随后Ford（2020）发表的评论，表达了对ICD-11复合型PTSD（CPTSD）诊断效度的担忧。Achterhof及其同事认为，CPTSD的效度需要比潜在类别分析（LCA）和潜在剖面分析（LPA）提供的证据更多。Ford则提出了一个更宽泛的观点，即当前CPTSD的概念并未涵盖遭受创伤影响后的全部症状，并总结CPTSD的当前定义需要修订以代表一个独特的、连贯的和有效的结构。在这封信中，我们总结了实证数据，这些数据总体上支持CPTSD诊断的结构效度，并指出了ICD-11中提出的CPTSD概念上的连贯性和完整性。我们同意Ford和Achterhof及其同事的观点，即CPTSD的结构效度应建立在不同方法学的证据之上，仔细审查CPTSD与其他疾病的区别与区别，以及评估其在理解 and 治疗创伤暴露个体中的价值。基于流行病学、临床和神经科学研究的最新证据，我们得出结论：ICD-11中CPTSD诊断为未来有关复杂型PTSD的研究提供了科学的基础。

A recent EJPT editorial by Achterhof, Huntjens, Meewisse, and Kiers (2019) and a following commentary by Ford (2020) have expressed concerns about the validity of the ICD-11 complex PTSD (CPTSD) diagnosis. Achterhof and colleagues argue that the validity of CPTSD requires more evidence than can be provided by latent class analyses (LCA) and latent profile analyses (LPA). Ford takes a broader view and introduces a general definition of complex posttraumatic stress disorder or ‘cPTSD’ which incorporates a range of symptoms inclusive of DSM-IV, DSM-5, ICD-11 PTSD and CPTSD and argues that given the inconsistent findings resulting from these various studies, the CPTSD diagnosis requires revision in order to represent a distinct, cohesive and valid construct. We counter that inconsistencies found across studies representing past formulations of complex PTSD do not speak to the validity or value of the ICD-11 CPTSD diagnosis. Indeed, ICD-11 CPTSD substantially benefited from past empirical work on the effects of complex trauma. Its formulation followed from careful attention to symptoms which consistently emerged across various studies as well as attention to those that did not and were not included. In this letter, we summarize the substantive data which support the construct validity of the CPTSD diagnosis and indicate the conceptual coherence and integrity of CPTSD as presented in ICD-11. We agree with both Ford and Achterhof and colleagues that the validity of the ICD-11 CPTSD construct should be built on evidence from different methodologies, a careful review of how CPTSD is the same versus different from other disorders, and assessment of its value in understanding and treating individuals who have experienced trauma. We conclude based on current evidence from epidemiological, clinical and neuroscience studies that the ICD-11 CPTSD diagnosis provides a scientifically sound foundation for future investigations about complex PTSD.

In June 2018, the World Health Organization released the 11th version of its diagnostic system,

the *International Classification of Diseases and Related Health Problems* (ICD-11; World Health Organization, 2018). This release included alongside a revised version of PTSD, a new diagnosis of CPTSD and in May 2019, the diagnosis was accepted by member nations of the WHO. This marked an important development in the field of psychotraumatology as ICD diagnoses are used to track diseases worldwide and are the basis for the identification of effective interventions and the deployment of resources on a global level (First, Reed, Hyman, & Saxena, 2015). The presence of the pair of diagnoses, PTSD and CPTSD provides a more refined organization of the psychological outcomes that can result from trauma and is intended to guide more tailored and effective treatment planning.

The ICD-11 diagnosis of CPTSD owes its origin to the first formulation of complex PTSD (Herman, 1992), particularly in the notion that repeated and multiple types of interpersonal trauma from which escape is difficult or impossible have a distinct effect on the capacity to regulate emotions, on self-identity and on relational capacities. Radical for the time, Herman also noted that similar outcomes obtained whether such events occurred during childhood (sexual or physical abuse by caregivers) or adulthood (war imprisonment, domestic violence). The formulation of ICD-11 CPTSD, however, departs from Herman’s initial proposal, and from its operationalization in the proposed diagnosis of Disorders of Extreme Stress Not Otherwise Specified (DESNOS; Pelcovitz et al., 1997). As initially described by Herman (1992) PTSD symptoms played no part in the articulation of the syndrome and they are not included in the DESNOS symptom set. In contrast, the more recent formulation of CPTSD described in ICD-11 includes not only disturbances in the domains of affect, identity and relational capacities (collectively called disturbances in self-organization or DSO) but also classic PTSD symptoms of re-experiencing, avoidance

and sense of threat (collectively called PTSD symptoms). This decision was based on data collected during the evaluation of DSM-IV PTSD and DESNOS in which it emerged that the vast majority (97%) of those who had been exposed to early life or multiple forms of trauma and endorsed DESNOS symptoms also endorsed classic PTSD symptoms of re-experiencing, avoidance and arousal (Roth, Newman, Pelcovitz, van der Kolk, & Mandel, 1997).

The unification of this symptom profile also has an empirically supported theoretical frame based on resource loss theory (Hobfoll, 1989) that links symptoms of PTSD and disturbances in self-organization in a fundamental way. In this frame, potentially traumatic events simultaneously adversely affect an individual's physical well-being as well as reduce capacity to cope by negatively impacting the essential psychological resources of positive sense of self, and capacity for emotion regulation and social connectedness. A sense of threat is amplified when the harm of the event exceeds the resources to effectively respond. Repeated traumatic events continually reduce resources creating a greater risk of harm and sense of threat with additional exposures (e.g. Hobfoll, Mancini, Hall, Canetti, & Bonanno, 2011).

Furthermore, following attachment/social theory, traumas of an interpersonal nature are particularly toxic because social bonds strongly influence the sense of self, relational and emotion regulation capacities, building and restoring them under normative conditions and impairing and disturbing them under circumstances of abuse and other forms of violence (Charuvastra & Cloitre, 2008). The CPTSD profile includes both PTSD and DSO and implies that sense of threat and disturbed sense of self are dynamically and integrally related to each other over time. The formulation also implies that treatment of one type of problem (PTSD or DSO) will influence the other and that treatment should be conceived and organized to efficiently and effectively resolve the full range of symptoms.

The conceptual coherence and integrity of the CPTSD symptom profile have been demonstrated in at least 16 published studies of latent profile analyses (LPA) and latent class analyses (LCA) where a symptom profile of CPTSD has consistently emerged from and has been distinguishable from a PTSD profile. The samples included individuals who had experienced different types of trauma, ranging from childhood abuse (Cloitre, Garvert, Brewin, Bryant, & Maercker, 2013) to being a prisoner of war (Zerach, Shevlin, Cloitre, & Solomon, 2019) and diverse study samples whose countries of origin included the United States, the United Kingdom, Austria, Denmark, Israel, Syria and Uganda. Eight of the studies were mentioned by Achterhof et al. (2019) and an additional eight are available (Folke, Nielsen, Andersen,

Karatzias, & Karstoft, 2019; Haselgruber, Sölva, & Lueger-Schuster, 2019; Kazlauskas, Gegieckaite, Hyland, Zelviene, & Cloitre, 2018; Kazlauskas et al., 2020; Liddell et al., 2019; Murphy, Elklit, Dokkedahl, & Shevlin, 2016; Palic et al., 2016; Zerach et al., 2019). CPTSD classes identified in this manner have been shown to have a greater functional impairment, greater comorbidity (including depression, anxiety and dissociation) and lower quality of life relative to the PTSD class. In at least one prospective study of Israeli POWs, class assignment of CPTSD vs. PTSD predicted functional impairment, poorer health, greater cognitive impairment and greater loneliness 8 years later. While the type of trauma history has yet to be firmly established as a differential predictor of CPTSD versus PTSD, CPTSD has been consistently associated with a greater accumulation of childhood trauma and greater accumulation of interpersonal traumas across the lifespan.

Achterhof et al. (2019) report on an assessment of a clinical sample of 245 Dutch patients with the aim of settling 'the issue on the validity of PTSD vs. CPTSD as separate diagnoses, answering the question: Is the use of these methods a valid and decisive way to settle this issue?' (p. 3). First, the answer to this question is 'No.' The use of statistical methods that cluster either indicators or people will never provide a 'decisive' answer to such a complex question. However, they can help by adding to a cumulative body of evidence based on a range of different research methods and statistical techniques. We agree with Guion (1980) that '... the evaluation [of validity] cannot be expressed with a single research result.' (p. 3). It is proposed that the total number of LCA and LPA analyses and the consistency of results as described above provide substantial support for the coherence and integrity of the CPTSD symptom profile with the recognition that these results derive from only one type of evidence of validity.

Second, the application of LCA and LPA methodology must be related to a question that the analyses can answer and the interpretation of the results needs to be assessed with the awareness of the patient population and the measures used. While some studies have found that LPA and LCA analyses can distinguish CPTSD from PTSD in clinical samples (e.g. Folke et al., 2019; Karatzias et al., 2017), this may not always be the case. Latent class and latent profile analyses can identify separate classes of individuals only when there is sufficient heterogeneity in type and severity of symptoms. In the Achterhof analyses, both the LPA and LCA clearly identified the presence of a CPTSD class of patients. The authors describe a second class, one with high PTSD symptoms and lower DSO symptoms but where the DSO symptoms are nevertheless endorsed at what might be a clinically significant level (i.e. a score of 2 or more), and suggest that this group may not be truly representative of a PTSD class. This is quite possible. Given this highly symptomatic patient population with

multiple symptoms and likely multiple forms of trauma, it may be that the sample represents a largely CPTSD patient population and that the analyses accurately identified different levels of severity of CPTSD because the majority of patients did indeed have CPTSD.

This interpretation remains equivocal however due to lack of consistency with previous measures and measurement strategies in the assessment of ICD-11 PTSD and CPTSD. Achterhof and colleagues used items that measured the frequency of symptom presentation ('Never' to 'Very Often') rather than their clinical relevance. This contrasts with current assessments such as the International Trauma Questionnaire (ITQ; Cloitre et al., 2018) which measures the degree to which symptoms 'bother' the respondent ('Not at all' to 'Extremely'). In addition, the items selected from the IES-R to describe ICD-11 PTSD are not consistent with the ICD-11 PTSD formulation or with IES-R items previously selected to represent it (see Hyland, Brewin, & Maercker, 2017). Differences in content and in how severity was measured may have contributed to a symptom presentation that is a relatively distant approximation of the CPTSD construct.

The Ford commentary reviews both the LPA/LCA literature as well network analyses and concludes that the wide array of findings thus far suggests that 'cPTSD' and ICD-11 PTSD and CPTSD may either 'require modification to constitute a distinct, cohesive and valid construct or may represent complex extension of other disorders ...' This conclusion is warranted only in reference to the construct of 'cPTSD.' In this commentary, the term cPTSD is used to reference a wide variety of diagnoses, syndromes and symptom clusters as representative of complex PTSD. cPTSD incorporates the PTSD, CPTSD and DSO subgroups observed in the LPA/LCA analyses. It also includes the DSM-IV and DSM-5 PTSD diagnoses referenced in the discussion of the network analyses. Cohesiveness and distinctiveness of a construct decrease as the number of phenomena which it includes increases. The concerns about distinctiveness, cohesion and validity are more likely applicable to 'cPTSD' than to ICD-11 CPTSD. Indeed, the intention behind the development of the CPTSD diagnosis, like all World Health Organization ICD diagnoses, was to provide a limited but clinically salient set of symptoms that are applicable across nations, regions and cultures across the globe. Studies of network analyses specific to ICD-11 CPTSD suggest some degree of success in meeting this goal.

Of the seven network studies described by Ford, six refer to DSM-IV or DSM-5 PTSD and so test the construct validity of the DSM rather than ICD. While these studies may be of ultimate interest as we compare the structure of different diagnostic systems, they do not provide insight into the stability and coherence of ICD-11 CPTSD. However, Knefel and colleagues (Knefel et al., 2019) recently completed

a series of network analyses assessing the symptoms of CPTSD using the ITQ across four nationally representative samples (total sample $n = 1591$). Despite differences in traumatic experiences, sociodemographic characteristics and symptom severity, the networks were very similar across the four countries, suggesting invariance of symptom structure and organization across different cultures. Overall, a total of five network analysis studies including the above have reported that CPTSD symptoms form two broad clusters corresponding to PTSD and DSO, supporting the structural validity of the CPTSD construct (Gilbar, 2020; Knefel et al., 2019; Knefel, Tran, & Lueger-Schuster, 2016; McElroy et al., 2019) and two of these included symptoms from other disorders, borderline personality disorder (Knefel et al., 2016) and anxiety and depression (Gilbar, 2020). The studies also show that while affective dysregulation symptoms of hyperactivation and of hypoactivation cluster among themselves, the clusters more strongly related to other symptoms than to each other, which may suggest the value of separating and expanding them.

Of final note and interest is that a growing number of LPA/LCA analyses have found that in addition to ICD-11 CPTSD and PTSD classes, a third class is delineated, namely a 'DSO' class, which describes a group with high scores on disturbances in self-organization and low PTSD symptoms (e.g. Knefel, Garvert, Cloitre, & Lueger-Schuster, 2015; Liddell et al., 2019; Palic et al., 2016; Perkonig et al., 2015). This class is an interesting phenomenon for future investigations. Ford includes these individuals under the 'cPTSD' umbrella but also states this class may have disorders such as dysthymia, borderline personality disorder or generalized anxiety disorders. This class may well represent other psychiatric disorders experienced by those exposed to traumatic events which are distinct from ICD-11 CPTSD and PTSD. Studies are needed which assess the full range of psychiatric disorders that follow from exposure to traumatic events. It would be valuable to look at predictors and correlates of this group separately from, and in comparison to, those who have CPTSD.

In conclusion, we fully recognize that each statistical technique has its limitations, whether it be latent class or profile analyses, confirmatory factor analysis, or network analysis, and that no one statistical process can definitively answer the question of whether ICD-11 CPTSD is a valid construct. However, there is evidence from dozens of studies utilizing many different statistical approaches, and the overwhelming majority have supported the validity of ICD-11 CPTSD as a unique construct. A large number ($n = 15$) of latent class and latent profile analyses have observed that CPTSD is distinguishable from PTSD, providing convergent and discriminant

validity for the CPTSD construct in a way that is easily understood and persuasive. Five network analyses have been completed, all of which have found that CPTSD symptoms organize into two clusters, PTSD and DSO, supporting the structural validity of the diagnosis. In addition and not discussed in this letter, several studies ($n = 8$; see Hyland, 2019) have reported on the factor structure of CPTSD and found consistent results across numerous countries and regions of the world (United States, the United Kingdom, Ireland, Israel, Africa, Japan, China, Brazil, Lithuania and Ukraine) indicating that ICD-11 CPTSD adequately represents ‘observed reality.’ Lastly, in a new and important methodological direction, an fMRI investigation found distinct neural profiles of CPTSD and PTSD during the processing of threatening or neutral faces (Bryant, Felmingham, Malhi, Andrew, & Korgaonkar, 2020). The identification of neural substrates that differentiate CPTSD from PTSD contributes to the cumulative body of evidence that includes a range of different research methods which support the validity of the CPTSD construct.

We propose that a history of trauma, particularly complex trauma, is associated with a variety of disorders such as borderline personality disorder, dissociative disorders, substance abuse and major depression, and recommend against having all of these conditions under the tent of a single disorder. This forces similarities in symptom profiles where distinct conditions may exist and may compromise the development of effective and precise treatment planning. The categorical approach to organizing psychopathology represented in ICD-11 and typical of diagnostic systems is motivated in large part by the goal of clinical utility where the diagnoses identify distinct symptom sets that consistently present together, are easily recognizable and lead to effective treatment planning. Various stakeholders such as trauma survivors, patients, families, clinicians, mental health providers and policymakers can be united in an understanding of the substantial adverse effect trauma has on individuals who experience it. Respect for the diversity of ways in which its effects are expressed will lead to better treatment and recovery.

There are several caveats and future directions for research in the study of ICD-11 PTSD and CPTSD (see Olff et al., 2019). First, almost all of the studies investigating these two disorders have used self-report measures (but see Bondjers, Hyland, Roberts, Bisson, Willebrand, & Arnberg, 2019; Powers et al., 2017). Assessment of PTSD and CPTSD, particularly as related to discriminant validity relative to other ICD and DSM-5 disorders will benefit from the use of clinical interview (see Roberts, Cloitre, Bisson, & Brewin, 2018). Continued investigation of the neurobiological substrates will be of value in understanding

potential differences in the aetiology and underlying processing associated with each disorder. Assessing potential differences in the relative importance of specific symptoms among different populations experiencing complex trauma (e.g. refugee status versus childhood abuse) is important for considering optimal treatment plans. Lastly, the investigation of differential outcomes among those who have PTSD vs. CPTSD may help guide more well-tailored treatment protocols.

Disclaimer

Marylène Cloitre and Chris Brewin participated as members of the World Health Organization Working Group on the Classification of Disorders Specifically Associated with Stress, reporting to the International Advisory Group for the Revision of ICD-10 Mental and Behavioural Disorders. However, the views expressed reflect the opinions of the authors and not necessarily the Working Group or Advisory Group and the content of this article does not represent WHO policy.

Disclosure Statement

No potential conflict of interest was reported by the authors.

For Social Media

Complex PTSD is now an official diagnosis in ICD-11. There are at least 29 studies supporting the validity of the CPTSD construct. The ICD-11 CPTSD diagnosis provides a scientifically sound foundation for future investigations about complex PTSD.

ORCID

Marylène Cloitre  <http://orcid.org/0000-0001-8029-1570>
Jonathan I. Bisson  <http://orcid.org/0000-0001-5170-1243>
Philip Hyland  <http://orcid.org/0000-0002-9574-7128>
Thanos Karatzias  <http://orcid.org/0000-0002-3002-0630>
Andreas Maercker  <http://orcid.org/0000-0001-6925-3266>
Neil P. Roberts  <http://orcid.org/0000-0002-6277-0102>
Mark Shevlin  <http://orcid.org/0000-0001-6262-5223>

References

- Achterhof, R., Huntjens, R. J. C., Meewisse, M.-L., & Kiers, H. A. L. (2019). Assessing the application of latent class and latent profile analysis for evaluating the construct validity of complex posttraumatic stress disorder: Cautions and limitations. *European Journal of Psychotraumatology*, 10(1), 1698223.
- Bondjers, K., Hyland, P., Roberts, N. P., Bisson, J. I., Willebrand, M., & Arnberg, F. K. (2019). Validation of a clinician-administered diagnostic measure of ICD-11 PTSD and complex PTSD: The International Trauma Interview in a Swedish sample. *European Journal of Psychotraumatology*, 10(1), 1665617.
- Bryant, R. A., Felmingham, K. L., Malhi, G., Andrew, E., & Korgaonkar, M. S. (2020). The distinctive neural

- circuitry of complex posttraumatic stress disorder during threat processing. *Psychological Medicine*, 1–8. doi:10.1017/s003329171900392
- Charuvastra, A., & Cloitre, M. (2008). Social bonds and posttraumatic stress disorder. *Annual Review of Psychology*, 59(1), 301–328.
- Cloitre, M., Garvert, D. W., Brewin, C. R., Bryant, R. A., & Maercker, A. (2013). Evidence for proposed ICD-11 PTSD and complex PTSD: A latent profile analysis. *European Journal of Psychotraumatology*, 4(1), 20706.
- Cloitre, M., Shevlin, M., Brewin, C. R., Bisson, J. I., Roberts, N. P., Maercker, A., ... Hyland, P. (2018). International Trauma Questionnaire. PscyTESTS Dataset. doi:10.1037/t73478-000
- First, M. B., Reed, G. M., Hyman, S. E., & Saxena, S. (2015). The development of the ICD-11 clinical descriptions and diagnostic guidelines for mental and behavioural disorders. *World Psychiatry*, 14(1), 82–90.
- Folke, S., Nielsen, A. B. S., Andersen, S. B., Karatzias, T., & Karstoft, K. (2019). ICD-11 PTSD and complex PTSD in treatment-seeking Danish veterans: A latent profile analysis. *European Journal of Psychotraumatology*, 10(1), 1686806.
- Ford, J. D. (2020). New findings questioning the construct validity of complex posttraumatic stress disorder (cPTSD): Let's take a closer look. *European Journal of Psychotraumatology*, 11(1), 1708145.
- Gilbar, O. (2020). Examining the boundaries between ICD-11 PTSD/CPTSD and depression and anxiety symptoms: A network analysis perspective. *Journal of Affective Disorders*, 262, 429–439.
- Guion, R. M. (1980). On trinitarian doctrines of validity. *Professional Psychology*, 11(3), 385–398.
- Haselgruber, A., Sölva, K., & Lueger-Schuster, B. (2019). Validation of ICD-11 PTSD and complex PTSD in foster children using the International Trauma Questionnaire. *Acta Psychiatrica Scandinavica*, 141(1), 60–73.
- Herman, J. L. (1992). Complex PTSD: A syndrome in survivors of prolonged and repeated trauma. *Journal of Traumatic Stress*, 5(3), 377–391.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513–524.
- Hobfoll, S. E., Mancini, A. D., Hall, B. J., Canetti, D., & Bonanno, G. A. (2011). The limits of resilience: Distress following chronic political violence among Palestinians. *Social Science & Medicine*, 72(8), 1400–1408.
- Hyland, P. (2019, London). Around the world in 30 minutes: An international perspective on PTSD and CPTSD research. Paper presented at the British Psychological Society. London, England.
- Hyland, P., Brewin, C. R., & Maercker, A. (2017). Predictive validity of ICD-11 PTSD as measured by the impact of event scale-revised: A 15-Year prospective study of political prisoners. *Journal of Traumatic Stress*, 30(2), 125–132.
- Karatzias, T., Shevlin, M., Fyvie, C., Hyland, P., Efthymiadou, E., Wilson, D., ... Cloitre, M. (2017). Evidence of distinct profiles of Posttraumatic Stress Disorder (PTSD) and Complex Posttraumatic Stress Disorder (CPTSD) based on the new ICD-11 Trauma Questionnaire (ICD-TQ). *Journal of Affective Disorders*, 207, 181–187.
- Kazlauskas, E., Gegieckaite, G., Hyland, P., Zelviene, P., & Cloitre, M. (2018). The structure of ICD-11 PTSD and complex PTSD in Lithuanian mental health services. *European Journal of Psychotraumatology*, 9(1), 1414559.
- Kazlauskas, E., Zelviene, P., Daniunaite, I., Hyland, P., Kvedaraite, M., Shevlin, M., & Cloitre, M. (2020). The structure of ICD-11 PTSD and Complex PTSD in adolescents exposed to potentially traumatic experiences. *Journal of Affective Disorders*, 265, 169–174.
- Knefel, M., Garvert, D. W., Cloitre, M., & Lueger-Schuster, B. (2015). Update to an evaluation of ICD-11 PTSD and complex PTSD criteria in a sample of adult survivors of childhood institutional abuse by Knefel & Lueger-Schuster (2013): A latent profile analysis. *European Journal of Psychotraumatology*, 6(1), 25290.
- Knefel, M., Karatzias, T., Ben-Ezra, M., Cloitre, M., Lueger-Schuster, B., & Maercker, A. (2019). The replicability of ICD-11 complex post-traumatic stress disorder symptom networks in adults. *The British Journal of Psychiatry*, 214(6), 361–368.
- Knefel, M., Lueger-Schuster, B., Bisson, J., Karatzias, T., Kazlauskas, E., & Roberts, N. P. (2019). A cross-cultural comparison of ICD-11 complex posttraumatic stress disorder symptom networks in Austria, the United Kingdom, and Lithuania. *Journal of Traumatic Stress*. doi:10.1002/jts.22361
- Knefel, M., Tran, U. S., & Lueger-Schuster, B. (2016). The association of posttraumatic stress disorder, complex posttraumatic stress disorder, and borderline personality disorder from a network analytical perspective. *Journal of Anxiety Disorders*, 43, 70–78.
- Liddell, B. J., Nickerson, A., Felmingham, K. L., Malhi, G. S., Cheung, J., Den, M., ... Bryant, R. A. (2019). Complex posttraumatic stress disorder symptom profiles in traumatized refugees. *Journal of Traumatic Stress*, 32(6), 822–832.
- McElroy, E., Shevlin, M., Murphy, S., Roberts, B., Makhshvili, N., Javakhishvili, J., ... Hyland, P. (2019). ICD-11 PTSD and complex PTSD: Structural validation using network analysis. *World Psychiatry*, 18(2), 236–237.
- Murphy, S., Elklit, A., Dokkedahl, S., & Shevlin, M. (2016). Testing the validity of the proposed ICD-11 PTSD and complex PTSD criteria using a sample from Northern Uganda. *European Journal of Psychotraumatology*, 7(1), 32678.
- Olf, M., Amstadter, A., Armour, C., Birkeland, M. S., Bui, E., Cloitre, M., ... Thoresen, S. (2019). A decennial review of psychotraumatology: What did we learn and where are we going? *European Journal of Psychotraumatology*, 10(1), 1672948.
- Palic, S., Zerach, G., Shevlin, M., Zeligman, Z., Elklit, A., & Solomon, Z. (2016). Evidence of complex posttraumatic stress disorder (CPTSD) across populations with prolonged trauma of varying interpersonal intensity and ages of exposure. *Psychiatry Research*, 246, 692–699.
- Pelcovitz, D., van der Kolk, B., Roth, S., Mandel, F., Kaplan, S., & Resick, P. (1997). *Structured interview for disorders of extreme stress*. PscyTESTS Dataset. doi:10.1037/t02660-00
- Perkonig, A., Höfler, M., Cloitre, M., Wittchen, H.-U., Trautmann, S., & Maercker, A. (2015). Evidence for two different ICD-11 posttraumatic stress disorders in a community sample of adolescents and young adults. *European Archives of Psychiatry and Clinical Neuroscience*, 266(4), 317–328.
- Powers, A., Fani, N., Carter, S., Cross, D., Cloitre, M., & Bradley, B. (2017). Differential predictors of DSM-5 PTSD and ICD-11 complex PTSD among African American women. *European Journal of Psychotraumatology*, 8(1), 1338914.

- Roberts, N., Cloitre, M., Bisson, J. I., & Brewin, C. (2018). PTSD & complex PTSD diagnostic interview schedule for ICD-11 (unpublished interview)
- Roth, S., Newman, E., Pelcovitz, D., van der Kolk, B., & Mandel, F. S. (1997). Complex PTSD in victims exposed to sexual and physical abuse: Results from the DSM-IV field trial for posttraumatic stress disorder. *Journal of Traumatic Stress, 10*(4), 539–555.
- World Health Organization. (2018). ICD-11: International classification of diseases 11th revision. Geneva: Author. Retrieved from <http://www.who.int/classifications/icd/revision/en>
- Zerach, G., Shevlin, M., Cloitre, M., & Solomon, Z. (2019). Complex posttraumatic stress disorder (CPTSD) following captivity: A 24-year longitudinal study. *European Journal of Psychotraumatology, 10*(1), 1616488.