## **Analysis**



Distinguishing between ICD-11 complex posttraumatic stress disorder and borderline personality disorder: clinical guide and recommendations for future research

Thanos Karatzias, Martin Bohus, Mark Shevlin, Philip Hyland, Jonathan I. Bisson, Neil Roberts and Marylène Cloitre

## Summary

Although complex post-traumatic stress disorder and borderline personality disorder are distinct disorders, there is confusion in clinical practice regarding the similarities between the diagnostic profiles of these conditions. We summarise the differences in the diagnostic criteria that are clinically informative and we illustrate these with case studies to enable diagnostic accuracy in clinical practice.

#### Keywords:

Comorbidity; education and training; personality disorders; posttraumatic stress disorder; trauma.

#### Copyright and usage

© Edinburgh Napier University, 2023. Published by Cambridge University Press on behalf of the Royal College of Psychiatrists.

Diagnostic accuracy is essential in clinical practice. A diagnosis can help clinicians formulate presenting complaints to enable treatment planning, to communicate accurate clinical information to other healthcare providers, as well as patients and their families, and to provide differential diagnosis and prognosis.<sup>1</sup> For many patients who experience distress, a diagnosis can instil hope for change and subsequent recovery.<sup>2</sup> The introduction of the new condition of complex post-traumatic stress disorder (CPTSD) and revised descriptions of personality disorders in ICD-11<sup>3</sup> have resulted in some confusion in clinical practice regarding the similarities between the diagnostic profiles of CPTSD and borderline personality disorder (BPD), which is identified in ICD-11 as personality disorder with the specifier 'borderline pattern'). In this report, we aim to disentangle the differences between the two conditions and provide some guidance on how to diagnose them accurately. This is especially important considering that CPTSD and BPD are commonly occurring disorders in some treatment settings and have overlapping symptom domains.4

# Disorders associated with stress versus personality disorders

CPTSD has been included in ICD-11 as one of several diagnoses designated under the general category 'disorders specifically associated with stress'.<sup>3</sup> The CPTSD diagnosis requires 'exposure to an event or series of events of an extremely threatening or horrific nature, most commonly prolonged or repetitive events from which escape is difficult or impossible. Such events include, but are not limited to, torture, concentration camps, slavery, genocide campaigns and other forms of organized violence, prolonged domestic violence, and repeated childhood sexual or physical abuse'. At a symptom level, CPTSD includes the core PTSD symptoms of (a) re-experiencing of the traumatic event in the present, (b) avoidance of traumatic reminders and (c) persistent perception of heightened current threat and the three symptom clusters of (a) pervasive problems in affect regulation, (b) negative self-concept and (c) relationship difficulties.

Borderline personality disorder has been somewhat reformulated in ICD-11 owing to the introduction of a fundamentally different approach to the classification of personality disorders.<sup>3</sup> Instead of diagnosing them according to categorical types, ICD-11 now requires impairments of the self (e.g. identity, self-worth, accuracy of self-view, self-direction) and of interpersonal functioning as core features. A 'borderline pattern' specifier has been included, based on the nine DSM-5 diagnostic criteria for BPD, where the salient diagnostic features are instability in sense of self, relationships and affect and the marked presence of impulsivity (e.g. unsafe sex, excessive drinking, reckless driving, uncontrollable eating). These diagnostic features represent domains of problems and symptoms that overlap with some of those found in the identity and relational symptom clusters of CPTSD.

Even though CPTSD is a new diagnosis, it has been used extensively in research and clinical practice for several decades and the overlap between BPD and symptoms of CPTSD has been a subject of debate in recent years. There have been multiple attempts to determine whether CPTSD and BPD diagnoses differ substantially enough to warrant separate diagnostic classifications. Different solutions have been offered in the literature. Some have suggested that CPTSD and BPD are distinct disorders with similar pathways, including neurological<sup>5</sup> and anthropogenic.6 Others have suggested that CPTSD and BPD symptoms can only co-occur as one syndrome and the two conditions are not distinct.<sup>7</sup> Finally, it has been proposed that CPTSD is the by-product of comorbid BPD and post-traumatic stress disorder (PTSD).<sup>8</sup> Nevertheless, as shown below, there is some emerging evidence suggesting that the two conditions can be distinguished.

## The evidence base

To date there have been seven studies exploring the association between BPD and ICD-11 CPTSD using disorder-specific measures. These studies have been conducted in general population samples as well as in clinical samples of traumatised individuals and they include factor analysis,<sup>9,10</sup> latent class analysis<sup>11–13</sup> and network analysis<sup>14,15</sup> designs. All these studies concluded that there is a group of individuals who endorse criteria of both conditions, but CPTSD and BPD were generally found to be distinct disorders.

Table 1 Comparison of diagnostic criteria of complex post-traumatic stress disorder (CPTSD) and borderline personality disorder (BPD)		
Symptoms included in the diagnosis	CPTSD Characterised by feelings of threat, low self-efficacy and relational distancing	BPD Characterised predominantly by instability in affect, sense of self and relationships
Trauma-related symptoms		
Trauma history required for diagnosis	Yes	No
Re-experiencing of the traumatic event	Yes	No
Avoidance of trauma-related symptoms	Yes	No
Heightened sense of threat	Yes	No
Emotional disturbance		
Emotional reactivity hard to calm down, or feeling numb or dissociated	Yes	No
Intense affective instability	No	Yes
Intense anger	No	Yes
Impulsivity in at least two areas that are self-damaging	No	Yes
Recurrent suicidal behaviours or self-mutilation	No	Yes
Transient stress-related paranoid ideation or severe dissociative symptoms	No	Yes
Chronic feelings of emptiness	No	Yes
Sense of self		
Persistent and pervasive negative sense of self as worthless or defeated	Yes	No
Marked and persistently unstable self-image or sense of self Interpersonal relationships	No	Yes
Difficulty staying close and maintaining relationships, tendency to distance, avoid or break off with conflict	Yes	No
Frantic efforts to avoid real or imagined abandonment	No	Yes
Unstable and intense interpersonal relationships that alternate between idealisation and devaluation	No	Yes

## **Differential diagnosis**

If the two conditions are distinct, how can we accurately diagnose each of them in clinical practice? As indicated in Table 1, there are several differences in the diagnostic criteria that are clinically informative. Although exposure to traumatic life events can precipitate both conditions, a history of traumatic life events is not required to generate a diagnosis of BPD, whereas it is a prerequisite for consideration of a CPTSD diagnosis. Nevertheless, it is also important to highlight that a significant number of people with BPD report exposure to traumatic life events such as sexual abuse.<sup>16</sup> Diagnostic items related to affect dysregulation are often equally endorsed across the disorders and in network analyses appear to link CPTSD and BPD.<sup>15</sup> However, BPD is associated with high rates of impulsive, suicidal and self-injurious behaviours, whereas in CPTSD these characteristics may be present but do not occur as frequently as other CPTSD symptoms nor as markedly or persistently as those seen in BPD.<sup>11</sup> Indeed, addressing suicidal and selfinjurious behaviours has been viewed as the defining concern and primary treatment target in BPD.<sup>17-19</sup> Our clinical observations with people with CPTSD suggest that difficulties in affect regulation are ego dystonic (i.e. incompatible with one's beliefs and personality), stressor specific and variable over time. In BPD, affect dysregulation and unstable mood seem to be ego syntonic (i.e. compatible with one's beliefs and personality) and persistent over time.<sup>20</sup> In BPD, self-concept difficulties reflect an unstable sense of self which includes changing goals and beliefs, whereas in CPTSD, individuals have a consistent and stable sense of self. Although it is frequently the case that individuals with either diagnosis will endorse feelings of low self-esteem, the additional endorsement of changing view of self would, in a differential diagnostic effort, rule out the diagnosis of CPTSD and support a BPD diagnosis. Relational difficulties in BPD are characterised by volatile patterns of interactions, whereas in CPTSD they consist of and are driven by difficulties in trusting others and relational avoidance and this is supported in factor analytic and other studies.9,12

Differential diagnosis may become challenging when assessing an individual with a history of trauma. In such cases, the differential diagnosis may be between CPTSD and BPD comorbid with PTSD (i.e. re-experiencing, avoidance and sense of threat). A diagnosis of BPD comorbid with PTSD versus a diagnosis of CPTSD is likely to be assigned if there is significant presence and continued risk of suicidal or self-injurious behaviours, unstable sense of self or instability in relationships. Below are two brief case vignettes that distinguish CPTSD from BPD with PTSD. It is also possible that a diagnosis of CPTSD can co-occur with BPD, as in the third vignette. Although instability in affect, self-identity and relationships is a salient feature of BPD and a helpful guide in differential diagnosis, it is possible for someone with CPTSD to have a diagnosis of BPD without these features. All three case vignettes were based on composite clinical material from general clinical experience that does not represent any particular clinical case.

## **CPTSD:** case vignette

Helen is a 38-year-old woman with a history of childhood sexual abuse and a recent sexual assault. She comes to the out-patient clinic because of nightmares and flashbacks that started following the sexual assault. She shows all ICD-11 PTSD symptoms, including a constant sense of threat and avoidance of going out of her home for fear of being assaulted again. She has a stable sense of self and has been employed at a veterinary centre and committed to the protection of animal rights since she was a young adult. She suffers from chronic low self-worth, feelings of defeat and of being extremely unlovable and attributes these to her childhood abuse. She has not had an intimate partner relationship for many years. She made one suicide attempt in her late teen years. When she is stressed or depressed, her thoughts turn to suicide as an option, but she has not acted on these feelings since her teen years, although she is comforted by the idea that she could 'end it all' if the pain of living got too bad. She does not have any substance misuse but on further assessment is diagnosed with co-occurring major depression,

generalised anxiety disorder and panic disorder. She is experiencing emotional numbing regularly.

## **BPD with PTSD: case vignette**

Marie is a 40-year-old woman with a long-standing history of mental health service use but has recently requested an increase in her appointments. Marie has a history of childhood abuse and experienced a recent sexual assault by her partner, which has resulted in nightmares, avoidance of her home and a chronic sense of heightened threat. She is currently living with a friend and has told her partner that she is planning to move out. She keeps tabs on his movements via an app so she can feel safe. She contemplates the years she has lost supporting him, considering that she was once a rising star in the theatre world. She plans to regain her footing in this profession and hopes she will be given the chance. She plans to get surgery to remove the scars resulting from cutting her arms and thighs, an activity that provided her with relief when stressed. She has made three suicide attempts over the past 18 months but states she did that only in moments of desperation and really wants to live. She uses marijuana regularly and cocaine when she can get it to help even out her moods. Two weeks following the assessment, Marie was given the option to enrol in a residential drug treatment programme but expressed concern because she had got back with her partner and all was going well.

## **CPTSD with BPD: case vignette**

Jim is a 30-year-old man who has been in weekly psychotherapy for several years, mostly to manage his anger problems. He had one inpatient hospital admission during his teens following a suicide attempt after being sexually abused by a teacher and had made a second attempt about 5 years ago. He occasionally engages in selfinjurious behaviour when in distress but reports that this is well controlled. He recently experienced a physical assault and robbery at gunpoint by several men and has had a re-emergence of all three PTSD symptoms, which had resolved after the hospital admission for the suicide attempt. The assault has also exacerbated his chronic low self-esteem; he is feeling very defeated and is withdrawing from socialising even more than usual. He is feeling more emotionally reactive about everything, and it can take him several hours to calm down from negative comments such as jokes about the age of his car. His anger has worsened and he has been bullying and intimidating colleagues at work. He threw his laptop against the wall when coworkers laughed and distracted him. He reports the onset of new bouts of paranoia at work, fearing that co-workers are stealing his best ideas and that he will lose his job. He feels relief by going out to clubs a few nights a week, getting high and having impersonal sex. He does not remember much of what happens on these nights. He knows this is not good for him, but it is a way of managing feelings of extreme fear of abandonment, loneliness and emptiness.

In the above scenario, the individual has CPTSD by virtue of endorsing all three PTSD symptom clusters, showing stable but low sense of self, avoidance of relationships and emotional reactivity. It may be appropriate to add the BPD diagnosis given that the person endorses five of the nine symptoms of BPD and these are likely contributing to life impairment. These are self-injurious behaviours, anger to the point of violent physical behaviours, paranoia, high levels of impulsivity (use of sex and drugs) and fears of abandonment.

## **Hierarchical diagnosis**

An important consideration in diagnosis is to avoid over-pathologising the individual. For example, a symptom that is common to both disorders, such as emotional volatility, should be considered as part of each disorder when summing the totality of symptoms to determine whether the person meets criteria for a specific disorder. However, once a primary diagnosis has been made, the symptom should not be counted twice. The symptom should be counted once and designated to the diagnosis that has been identified as primary. This approach is a 'hierarchical' method to diagnosis, where a symptom assigned to the primary diagnosis is not repeated in other secondary diagnoses that are under consideration.

The clinical utility in carefully considering these two diagnoses is primarily as a means by which to guide treatment decisions and provide an intervention that optimises outcomes by addressing the most life-threatening or impairing features associated with each disorder. BPD is likely to be the more severe disorder with the greater impairment, owing to the presence of suicidality and self-injurious behaviours. It is possible but remains to be seen whether recovery from instability in affect, sense of self and relationships requires longer treatment than recovery in someone who has a stable but severely negative self-concept and severe relational avoidance. However, it is likely that the types of intervention needed will differ. There may be some intervention components in mental health programmes for each disorder that overlap, particularly addressing commonly endorsed symptoms (e.g. affect dysregulation).

## **Future research**

We recommend that future research include surveying practitioners about what they find are the benefits and drawbacks of the current classification of CPTSD and BPD. In addition, the development of reliable and valid clinical interviews will further enable diagnostic accuracy of these two conditions. There are currently no validated clinician interview instruments for either ICD-11 CPTSD or personality disorders, but there is some emerging evidence for the usefulness of the International Trauma Interview (ITI) for the assessment of CPTSD (Test Version 3.2 was used, available from the authors, N.R., M.C., J.I.B. and C.R. Brewin, on request).<sup>21</sup>

Future research is also needed to assess the benefits of providing the same treatment programmes across the different diagnoses. Finally, there is a need to develop tailored treatments informed by the phenomenology and severity of these two conditions. A number of treatments with proven efficacy for PTSD, such as cognitive-behavioural therapy (CBT) and eve movement desensitisation and reprocessing (EMDR), might also be helpful for CPTSD.<sup>22</sup> It is also worth noting that dialectical behaviour therapy (DBT), a treatment that has been extensively used for people with BPD, has been modified and found effective for PTSD and comorbid BPD symptoms (DBT-PTSD<sup>23</sup>), BPD with comorbid PTSD<sup>24</sup> and BPD alone.<sup>25</sup> A trauma-informed modular approach has also been suggested as a helpful treatment model for CPTSD.26 The modular approach proposes that symptom clusters of CPTSD be targeted based on the individual's treatment goals and severity of their symptoms. Modular approaches such as Skills Training in Affective and Interpersonal Regulation (STAIR) have been found useful for those who have experienced childhood trauma and they can be a useful intervention for those with CPTSD.<sup>27</sup> There is a need for more research on effective treatments for CPTSD. Perhaps more careful consideration should be given to those who report most or apparently contradictory symptoms of both conditions. Existing evidence suggesting co-occurrence of symptoms for some might reflect false positives as a result of using self-assessment measures. However, considering that traumatic stressors precipitate CPTSD and can be a risk factor for BPD, the two conditions can co-occur in some people and may represent a trauma continuum of psychopathology,<sup>22</sup> with BPD positioned at the more severe end of the spectrum. For

those who present with both conditions, a trauma-informed approach may still be the best treatment option. There is an urgent need to explore the effectiveness of existing and new interventions for ICD-11 CPTSD, the new construct of personality disorder (including the new BPD identifier) and those who endorse symptoms of both conditions.

Thanos Karatzias (1), School of Health & Social Care, Edinburgh Napier University, Edinburgh, UK; and NHS Lothian, Rivers Centre for Traumatic Stress, Edinburgh, UK; Martin Bohus, Institute of Psychiatric and Psychosomatic Psychotherapy, Central Institute of Mental Health, Mannheim, Germany; Medical Faculty Mannheim, Heidelberg University, Heidelberg, Germany; and McLean Hospital, Harvard Medical School, Boston, Massachusetts, USA; Mark Shevlin (1), School of Psychology, Ulster University, Londonderry, Northern Ireland; Philip Hyland, Department of Psychology, Maynooth University, Kildare, Ireland; Jonathan I. Bisson (2), School of Medicine, Cardiff University, Cardiff, UK; Neil Roberts, School of Medicine, Cardiff University, and Psychology and Psychological Therapies Directorate, Cardiff and Vale University Health Board, Cardiff, UK; Marylène Cloitre, National Center for PTSD Dissemination and Training Division, VA Palo Alto Health Care System, Palo Alto, California, USA; and Department of Psychiatry and Behavioural Sciences, Stanford University, Stanford, California, USA

Correspondence: Thanos Karatzias. Email: t.karatzias@napier.ac.uk

First received 9 Nov 2022, final revision 10 Apr 2023, accepted 12 Apr 2023

## **Data availability**

Data availability is not applicable to this article as no new data were created or analysed in this study.

#### **Author contributions**

T.K.: original idea, first draft, final edit. M.B.: input on BPD issues, treatment considerations, final edit. M.S. and P.H.: input on research overlap between CPTSD and BPD symptoms, final edit. J.B.: clinical input / management, final edit. N.R.: CPTSD phenomenology, case studies, final edit. M.C.: case studies, input on similarities and differences in diagnostic profiles final edit.

## Funding

This research received no specific grant from any funding agency, commercial or not-for-profit sectors.

## **Declaration of interest**

None.

#### References

- 1 First MB, Pincus HA, Levine JB, Williams JB, Ustun B, Peele R. Clinical utility as a criterion for revising psychiatric diagnoses. *Am J Psychiatry* 2004; **161**: 946–54.
- 2 Perkins A, Ridler J, Browes D, Peryer G, Notley C, Hackmann C. Experiencing mental health diagnosis: a systematic review of service user, clinician, and carer perspectives across clinical settings. *Lancet Psychiatry* 2018; 5: 747–64.
- 3 World Health Organization. ICD-11 for Mortality and Morbidity Statistics. WHO, 2018.
- 4 Karatzias T, Hyland P, Bradley A, Cloitre M, Roberts NP, Bisson JI, et al. Risk factors and comorbidity of ICD-11 PTSD and complex PTSD: findings from a trauma-exposed population based sample of adults in the United Kingdom. *Depress Anxiety* 2019; **36**: 887–94.
- 5 Amad A, Radua J, Vaiva G, Williams SC, Fovet T. Similarities between borderline personality disorder and post traumatic stress disorder: evidence from restingstate meta-analysis. *Neurosci Biobehav Rev* 2019; 105: 52–9.
- 6 Grant DM, Beck JG, Marques L, Palyo SA, Clapp JD. The structure of distress following trauma: posttraumatic stress disorder, major depressive disorder, and generalized anxiety disorder. J Abnorm Psychol 2008; 117: 662–72.
- 7 Saraiya TC, Fitzpatrick S, Zumberg-Smith K, López-Castro T, E, Back SA, Hien D. Social–emotional profiles of PTSD, complex PTSD, and borderline personality disorder among racially and ethnically diverse young adults: a latent class analysis. J Trauma Stress 2021; 34: 56–68.

- 8 Kulkarni J. Complex PTSD a better description for borderline personality disorder? Australas Psychiatry 2017; 25: 333–5.
- 9 Hyland P, Karatzias T, Shevlin M, Cloitre M. Examining the discriminant validity of complex posttraumatic stress disorder and borderline personality disorder symptoms: results from a United Kingdom population sample. *J Trauma Stress* 2019; **32**: 855–63.
- 10 Powers A, Petri JM, Sleep C, Mekawi Y, Lathan EC, Shebuski K, et al. Distinguishing PTSD, complex PTSD, and borderline personality disorder using exploratory structural equation modeling in a trauma-exposed urban sample. J Anxiety Disord 2022; 88: 102558.
- 11 Cloitre M, Garvert DW, Weiss B, Carlson EB, Bryant RA. Distinguishing PTSD, complex PTSD, and borderline personality disorder: a latent class analysis. *Eur J Psychotraumatol* 2014; 5(1): 25097.
- 12 Frost R, Murphy J, Hyland P, Shevlin M, Ben-Ezra M, Hansen M, et al. Revealing what is distinct by recognising what is common: distinguishing between complex PTSD and borderline personality disorder symptoms using bifactor modelling. *Eur J Psychotraumatol* 2020; 11(1): 1836864.
- 13 Jowett S, Karatzias T, Shevlin M, Albert I. Differentiating symptom profiles of ICD-11 PTSD, complex PTSD, and borderline personality disorder: a latent class analysis in a multiply traumatized sample. *Personal Disord* 2020; 11: 36–45.
- 14 Knefel M, Tran US, Lueger-Schuster B. The association of posttraumatic stress disorder, complex posttraumatic stress disorder, and borderline personality disorder from a network analytical perspective. J Anxiety Disord 2016; 43: 70–8.
- 15 Owczarek M, Karatzias T, McElroy E, Hyland P, Cloitre M, Kratzer L, et al. Borderline personality disorder (BPD) and complex post traumatic stress disorder (CPTSD): a network analysis in a highly traumatised clinical sample. J Pers Disord 2023; 37: 112–29.
- 16 de Aquino Ferreira LF, Pereira FH, Benevides AM, Melo MC. Borderline personality disorder and sexual abuse: a systematic review. *Psychiatry Res* 2018; 262: 70–7.
- 17 Linehan MM, Comtois KA, Murray AM, Brown MZ, Gallop RJ, Heard HL, et al. Two-year randomized controlled trial and follow-up of dialectical behavior therapy vs therapy by experts for suicidal behaviors and borderline personality disorder. Arch Gen Psychiatry 2006; 63: 757–66.
- 18 Linehan MM, Korslund KE, Harned MS, Gallop RJ, Lungu A, Neacsiu AD, et al. Dialectical behavior therapy for high suicide risk in individuals with borderline personality disorder: a randomized clinical trial and component analysis. JAMA Psychiatry 2015; 72: 475–82.
- 19 DeCou CR, Comtois KA, Landes SJ. Dialectical behavior therapy is effective for the treatment of suicidal behavior: a meta-analysis. *Behav Ther* 2019; 50: 60–72.
- 20 Biskin RS, Paris J. Diagnosing borderline personality disorder. CMAJ 2012; 184: 1789–94.
- 21 Gelezelyte O, Roberts NP, Kvedaraite M, Bisson JI, Brewin CR, Cloitre 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. *Eur J Psychotraumatol* 2022; **13**(1): 2037905.
- 22 Voorendonk EM, De Jongh A, Rozendaal L, Van Minnen A. Trauma-focused treatment outcome for complex PTSD patients: results of an intensive treatment programme. *Eur J Psychotraumatol* 2020; **11**(1): 1783955.
- 23 Bohus M, Kleindienst N, Hahn C, Müller-Engelmann M, Ludäscher P, Steil R, et al. Dialectical behavior therapy for posttraumatic stress disorder (DBT-PTSD) compared with cognitive processing therapy (CPT) in complex presentations of PTSD in women survivors of childhood abuse: a randomized clinical trial. JAMA Psychiatry 2020; 77: 1235–45.
- 24 Kleindienst N, Steil R, Priebe K, Müller-Engelmann M, Biermann M, Fydrich T, et al. Treating adults with a dual diagnosis of borderline personality disorder and posttraumatic stress disorder related to childhood abuse: results from a randomized clinical trial. J Consult Clin Psychol 2021; 89: 925–36.
- 25 Gillespie C, Murphy M, Joyce M. Dialectical behavior therapy for individuals with borderline personality disorder: a systematic review of outcomes after one year of follow-up. J Pers Disord 2022; 36: 431–54.
- 26 Karatzias T, Cloitre M. Treating adults with complex posttraumatic stress disorder using a modular approach to treatment: rationale, evidence, and directions for future research. J Trauma Stress 2019; 32: 870–6.
- 27 Cloitre M, Stovall-McClough KC, Nooner K, Zorbas P, Cherry S, Jackson CL, et al. Treatment for PTSD related to childhood abuse: a randomized controlled trial. *Am J Psychiatry* 2010; 167: 915–24.
- 28 Hyland P, Murphy J, Shevlin M, Bentall RP, Karatzias T, Ho GW, et al. On top or underneath: where does the general factor of psychopathology fit within a dimensional model of psychopathology? *Psychol Med* 2021; 51: 2422–32.