Title
Is self-compassion a worthwhile therapeutic target for ICD-11 Complex PTSD (CPTSD)?)

Running Head
Self-compassion and CPTSD

Authors
Thanos Karatzias
Edinburgh Napier University, School of Health & Social Care, Edinburgh, UK
NHS Lothian, Rivers Centre for Traumatic Stress, Edinburgh, UK

Philip Hyland
National College of Ireland, School of Business, Dublin, Ireland
Centre for Global Health, Trinity College Dublin, Dublin, Ireland

Aoife Bradley
Edinburgh Napier University, School of Health & Social Care, Edinburgh, UK

Claire Fyvie, Katharine Logan, Paula Easton, Jackie Thomas, Sarah Philips
NHS Lothian, Rivers Centre for Traumatic Stress, Edinburgh, UK

Jonathan I. Bisson
Cardiff University, School of Medicine, Cardiff, UK

Neil P. Roberts
Psychology and Psychological Therapies Directorate, Cardiff and Vale University Health Board, Cardiff, UK

Cardiff University, School of Medicine, Cardiff, UK

Marylene Cloitre
National Center for PTSD, Palo Alto Health Care System, Stanford University, Palo Alto, CA, USA

Mark Shevlin
Ulster University, School of Psychology, Derry, Northern Ireland

Corresponding Author:
Prof. Thanos Karatzias, Edinburgh Napier University, Sighthill Campus, Sighthill Court, Edinburgh EH11 4BN, Scotland UK Tel. (+44) (0) 131 455 5345, Email.t.karatzias@napier.ac.uk
Abstract

**Background**
Two ‘sibling’ disorders have been proposed for the forthcoming 11th version of the *International Classification of Diseases* (ICD-11); Posttraumatic Stress Disorder (PTSD) and Complex PTSD (CPTSD). Examining psychological factors that may be associated with CPTSD, such as self-compassion, is an important first step in its treatment that can inform consideration of which problems are most salient and what interventions are most relevant.

**Aims**
We set out to investigate the association between self-compassion and the two factors of CPTSD: the PTSD factor (re-experiencing, avoidance, sense of threat) and the Disturbances in Self-Organization (DSO) factor (affect dysregulation, negative self-concept and disturbances in relationships). We hypothesised that self-compassion subscales would be negatively associated with both PTSD and DSO symptom clusters.

**Method**
A predominately female, clinical sample (N = 106) completed self-report scales to measure traumatic life events, ICD-11 CPTSD and self-compassion.

**Results**
Significant negative associations were found between the CPTSD Disturbances of Self Organisation (DSO) clusters of symptoms and self-compassion subscales but not for the PTSD ones. Specifically it was also found that self-judgement and common humanity significantly predicted hypoactive affect dysregulation whereas self-judgement and isolation significantly predicted negative self-concept.

**Conclusions**
Our results indicate that self-compassion may be a useful treatment target for ICD-11 CPTSD, particularly for symptoms of negative self-concept and affect dysregulation. Future research is required to investigate the efficacy and acceptability of interventions that have implicit foundation on compassion.

**Key words:** self-compassion, psychological trauma, CPTSD, ICD-11
Introduction

“Third wave” cognitive behavioural therapies, such as Acceptance and Commitment Therapy (ACT, Hayes, Strosahl and Wilson, 1999), Mindfulness Based Cognitive Therapy (MBCT, Segal, Williams & Teasdale, 2002), Dialectical Behavioural Therapy (DBT, Linehan, 1993) and Compassion Focussed Therapy (CFT, Gilbert, 2005, 2010) all focus on ameliorating psychological distress by changing the person’s relationship with their problems. One way to achieve this is to develop a more compassionate attitude towards one’s self (i.e., self-compassion). Neff (2003a, p. 87) defines self-compassion as “being touched by and open to one’s own suffering, not avoiding or disconnecting from it, generating the desire to alleviate one’s suffering and to heal oneself with kindness. Self-compassion also involves offering non-judgmental understanding to one’s pain, inadequacies and failures, so that one’s experience is seen as part of the larger human experience.”

Self-compassion has been described as involving three distinct elements including (1) being kind and understanding toward oneself in times of difficulty, (2) being mindfully aware of painful thoughts and feelings to prevent over-identification, and (3) seeing one’s struggles as part of a broader human experience rather than as a unique and isolating experience (Neff, 2011). Thus, self-compassion can reduce self-judgment, rumination, and feelings of isolation. Self-compassion can also act as an adaptive coping mechanism that increases resilience, positive cognitions and decreases avoidance-oriented coping (Allen & Leary, 2010; Krieger et al., 2013). For all these reasons, self-compassion has been identified as a worthwhile therapeutic target for anxiety, depression and stress (MacBeth & Gumley, 2012). A number of studies have highlighted the protective effects of self-compassion following exposure to stressors. For example, in a recent study, shame-prone individuals were randomized to describe a shameful event or reflect on the event with self-compassion. It was found that
those instructed to adopt a self-compassionate position had less shame, rumination, and depressive symptoms relative to those who did not (Johnson & O’Brien, 2013).

The association between posttraumatic stress disorder (PTSD) symptoms and self-compassion has also been explored in previous research. Thompson and Waltz (2008) found that in a sample of college students self-compassion was negatively correlated with symptoms of avoidance, but not re-experiencing or hyperarousal. Furthermore, Maheux and Price (2015) investigated the association between self-compassion and PTSD symptomatology in two general population samples. They found that self-compassion was negatively correlated with aggregated PTSD symptoms for both DSM-IV and DSM-5 descriptions of PTSD. Self-compassion was correlated with avoidance symptoms for DSM-IV and with all symptom clusters for the DSM-5. There is, however, less research on the association between PTSD symptomatology and self-compassion in clinical samples, although existing studies report similar findings with the general population. In a sample of treatment-seeking women who were survivors of interpersonal violence with PTSD, Scoglio et al. (2015) reported a significant negative relationship between PTSD symptoms and self-compassion.

The upcoming 11th version of the International Classification of Diseases (ICD-11), produced by the World Health Organization (WHO), will include two trauma-based disorders: PTSD and Complex PTSD (CPTSD; Maercker et al., 2013). The description of PTSD in ICD-11 is simpler than that provided within the DSM-5. In contrast to the 20 symptoms spread across four symptom clusters in DSM-5, ICD-11 PTSD includes just six ‘core’ symptoms across three clusters, each of which is directly related to one’s traumatic exposure: re-experiencing in the here and now (Re: 2 symptoms), avoidance (Av: 2 symptoms), and a sense of current threat (Th: 2 symptoms). Diagnosis of ICD-11 PTSD requires the presence of one symptom per cluster, plus evidence of functional impairment.
CPTSD is a broader diagnosis that includes the core PTSD symptoms plus an additional set of symptoms that are collectively referred to as ‘disturbances in self-organisation’ (DSO). These symptoms are intended to capture pervasive psychological disturbances associated with experiences that are typically comprised of chronic or multiple types of traumatic exposure. DSO symptoms are distributed across three clusters: affective dysregulation, both hyper-activation and hypo-activation, negative self-concept, and disturbances in relationships. A CPTSD diagnosis requires that the PTSD criteria be met in addition to endorsement of symptoms from each of the DSO clusters.

The association between self-compassion and ICD-11 PTSD and DSO symptoms has never been explored before. Given the inclusion of symptoms relating to dysregulated emotions, persistent negative evaluations of the self, and relational difficulties in the ICD-11 CPTSD symptom profile, it is plausible that self-compassion will correlate more strongly with these trauma reactions, as compared to the ‘core’ trauma reactions captured in the ICD-11 PTSD symptom profile. Given the paucity of clinical interventions that currently exist for ICD-11 CPTSD, identification of a unique psychological correlate of this disorder could have important implications for the treatment of CPTSD. In the present study, we aimed to explore the associations between the different facets of self-compassion and each of the ICD-11 PTSD and DSO symptom clusters using a newly developed measure of CPTSD symptomatology (i.e. the International Trauma Questionnaire [ITQ]: Cloitre et al., 2015) amongst a clinical sample of traumatised persons. We hypothesised that self-compassion subscales would be negatively associated with both PTSD and DSO symptom clusters.
Methods

Participants and procedures

Participants were referred by general practitioners, psychiatrists, or psychologists for psychological therapy at a National Health Service trauma centre in Scotland ($N = 106$). Data were collected during an initial assessment using standardised scales. A psychology assistant was present if participants had any questions regarding the scales. The sample was primarily female (93.4%) and of British origin (91.3%) with a mean age of 39.25 years (SD = 10.94, range = 19-62). Most participants had finished post-secondary education (56.6%), were currently unemployed (58.1%), and single (59.2%).

Measures

Childhood Trauma: The Childhood Trauma Questionnaire (CTQ: Bernstein and Fink, 1998) is a 28-item, self-report questionnaire, that assesses exposure to a range of different childhood traumas. The scale produces five subscales, each with five items: Emotional Abuse, Physical Abuse, Sexual Abuse, Emotional Neglect, and Physical Neglect. Items are responded to using a 5-point scale ranging from “never true” (1) to “very often true” (5) in regards to the endorsed frequency of the event and the mean scores for each subscale were calculated. The measure demonstrated good internal consistency, test-retest reliability, and convergent validity (Bernstein & Fink, 1998). In the present study, high levels of internal consistency were found for each of the sub-scales, (emotional abuse $\alpha = .79$ physical abuse $\alpha = .80$, sexual abuse $\alpha = .97$, emotional neglect $\alpha = .90$, physical neglect, $\alpha = .69$) and for the total scale ($\alpha = .87$).

Traumatic Life events: The Life Events Checklist (LEC: Gray et al., 2004) is a 17-item, self-report measure designed to screen for potentially traumatic events in a respondent’s lifetime. The LEC assesses lifetime exposure to 16 traumatic events (e.g. natural disaster,
physical assault, life threatening illness/injury) and the 17th item, “Any other very stressful event/experience”, can be used to indicate exposure to a trauma that was not listed. For each item, the respondent checks whether the event ‘Happened to me’ (1), ‘Witnessed it happening to somebody else’ (2), ‘Learned about it happening to someone close to me’ (3), ‘Part of my job’ (4), ‘Not sure it applies’ (5), ‘Does not apply to my experience’ (6). In order to create a summed total to represent the number of different traumatic life events that has been experienced the items were recoded into binary variables with ‘Happened to me’ and ‘Witnessed it’ responses being coded as ‘1’ and all other responses coded as ‘0’. This produced a single total cumulative index variable with possible scores ranging from 0 to 16; item 17 was not included as the nature of the trauma could not be identified.

**ICD-11 CPTSD:** The ITQ (Version 1.2, Cloitre et al., 2015 – formerly the ‘ICD-11 Trauma Questionnaire’) is a self-report measure of the ICD-11 diagnoses of PTSD and CPTSD following exposure to traumatic events as defined by the CTQ and LEC. Six items measure the PTSD symptoms (2 items per symptom cluster); 16 items measure the DSO symptoms (5 items measure ‘affective dysregulation – hyper-activation’, 4 items measure ‘affective dysregulation – hypo-activation’, 4 items measure ‘negative self-concept’, and 3 items measure ‘disturbances in relationship’); and six items measure functional impairment associated with both the PTSD and DSO symptoms. Individuals respond to each PTSD item in terms of how much they have been bothered by the symptom over the past month, and respond to each DSO item in terms of how they typically feel, think about themselves, and relate to others. All items are measured using a five-point Likert scale ranging from 0 (‘Not at all’) to 4 (‘Extremely’). Symptom severity scores for each PTSD and DSO symptom are calculated by summating responses to each item and, in every case, higher scores indicate greater symptom severity. The psychometric properties of the ITQ have been validated in number of studies, including within a larger clinical sample (see Karatzias et al., 2016;
Karatzias et al., 2017). The internal reliability of the PTSD ($\alpha = .74$) and DSO ($\alpha = .89$) items in the current sample were satisfactory.

Self-compassion: The Self-Compassion Scale (SCS: Neff, 2003b) is a 26-item self-report instrument which assesses trait levels of self-compassion across six subscales. The SCS includes items that measure how often people respond to feelings of inadequacy or suffering with: self-kindness (e.g., “I try to be loving towards myself when I’m feeling emotional pain”), self-judgment (e.g., “I’m disapproving and judgemental about my own flaws and inadequacies”), common humanity (e.g., “I try to see my failings as part of the human condition”), isolation (e.g., “When I fail at something that’s important to me, I tend to feel alone in my failure”), mindfulness (e.g., “When something upsets me I try to keep my emotions in balance”), and over-identification (e.g., “When I’m feeling down I tend to obsess and fixate on everything that’s wrong”). Responses on the SCS are captured using a 5-point scale ranging from ‘Almost Never’ to ‘Almost Always’, with higher scores representing greater self-compassion. The SCS has demonstrated good internal consistency (a = .77 - .81 across total subscales) as well as good test-retest reliability (a = .85 - .93 across total and subscales). The SCS has also demonstrated good discriminant validity (e.g. low to moderate associations with self-esteem measures such as the Self-determination Scale ($r = .43$)) and construct validity (e.g. association with DEQ self-criticism subscale $r = .65$). (Neff, 2003b). Additionally, several studies using diverse samples have supported the validity of the six-factor structure of the SCS (e.g., Arimitsu 2014; Azizi et al. 2013; Castilho et al. 2015). In the present study, good levels of internal consistency were found for each of the sub-scales (self-kindness $\alpha = .72$, self-judgement $\alpha = .83$, common humanity $\alpha = .70$, isolation $\alpha = .75$, mindfulness, $\alpha = .66$, over identified, $\alpha = .71$) and for the total scale ($\alpha = .88$).
Data Analysis

Data were analysed using the Statistical Package for Social Sciences (SPSS) version 23. Means and standard deviations were calculated for continuous variables and frequencies (%) for categorical variables (Table 1). To test for multicollinearity, relationships between continuous variables were investigated by Pearson’s correlations, and the Tolerance and VIF statistics. No bivariate correlation exceeded 0.70, all Tolerance values exceeded .10 and no VIF values exceeded 10 (Tabachnick & Fidell, 2011), thus no variables were excluded from the regression analysis. Standard multiple regression analyses were used to determine the unique associations between each facet of self-compassion and the different symptom clusters of ICD-11 PTSD (Re, Av, Th) and CPTSD (AD, NSC, DR). Each model also included age and gender as covariates (see Table 2). If an overall model was statistically significant the percentage of explained variance attributable to each predictor was calculated and these estimates are added in parenthesis in Table 2.

Results

The mean number of traumatic life events was 6.99 (SD = 2.80), with only a small number (1.9%) reporting exposure to a single traumatic event; a total of 70.8% of the sample reported experiencing between 3 and 8 traumatic events. The most commonly reported traumatic experiences were physical assault (95.1%), and emotional abuse during childhood (93.1%). All participants reported experiencing at least one traumatic life event. Both childhood and adulthood traumatic experiences had occurred in 94.3% of the sample. No participants reported exposure to traumatic events only in childhood, while 1% experienced traumatic events only in adulthood. The majority of the current sample met probable diagnostic requirement for either ICD-11 PTSD or CPTSD (79.8%). The taxonomic structure
of the ICD-11 only permits a diagnosis of PTSD or CPTSD, but not both. Accordingly, more individuals satisfied the diagnostic criteria for CPTSD (62.5%) than PTSD (17.3%).

The bivariate correlations between all self-compassion and PTSD and DSO symptom clusters are reported in Table 1. None of the self-compassion subscales were significantly associated with the three PTSD symptom clusters. Each self-compassion subscale was significantly and negatively correlated with the hypo-activation (r values ranged from -.27 to -.43) and negative self-concept (r values ranged from -.20 to -.45) symptom clusters of CPTSD. Four self-compassion subscales (self-kindness, self-judgement, common humanity, and isolation) were significantly and negatively correlated with disturbances in relationships (r values ranged from -.21 to -.26) and the over-identification subscales was the only self-compassion facet associated with the hyper-activation cluster (r = -.25). This pattern of association suggests that self-compassion is uniquely associated with CPTSD symptoms.

The PTSD and DSO symptom cluster scores were regressed onto the six facets of self-compassion, while also controlling for gender and age (see Table 2 for all multiple regression results). The proportions of variance explained in the re-experiencing (5.2%), avoidance (5.3%), and sense of threat (0.5%) PTSD symptom clusters were all very low and non-significant. With respect to the DSO symptom clusters, the proportion of variance explained in the ‘affective dysregulation – hyper-activity’ (4.9%) and ‘disturbances in relationships’ (3.8%) symptoms were also low and non-significant. However, the self-compassion model explained 29.2% of variance in ‘negative self-concept’ symptoms (R² = .292; F (8, 94) = 4.84, p < .001), and 21.1% of variance in ‘affective dysregulation – hypo-activity’ symptoms (R² = .211; F (8, 90) = 4.28, p < .001).
The ‘affective dysregulation – hypo-activity’ CPTSD symptom cluster was uniquely associated with two facets of self-compassion: self-judgement ($\beta = -.35$ (95% CI = -.67, -.03), $p < .05$), and common humanity ($\beta = -.29$ (95% CI = -.54, -.05), $p < .05$). The ‘negative self-concept’ CPTSD symptom cluster was also uniquely associated with two facets of self-compassion: self-judgement ($\beta = -.62$ (95% CI = -.95, -.29), $p < .001$), and isolation ($\beta = -.36$ (95% CI = -.67, -.06), $p < .05$). Overall, the results of the multiple regression analyses indicate that self-compassion is associated with CPTSD symptomatology but not PTSD symptomatology.

Table 2 about here

**Discussion**

We set out to investigate if self-compassion is uniquely associated with ICD-11 CPTSD symptom clusters so that we may identify a unique psychological correlate of this newly proposed diagnostic entity. Identifying psychological factors that are independently associated with CPTSD is an important first step in its treatment as these findings can inform consideration of which problems are most salient and what interventions are most relevant. The bivariate correlation results initially indicated that self-compassion was uniquely associated with specific CPTSD symptomatology including affect dysregulation (particularly the hypo-activity component of this symptom cluster), negative self-concept, and disturbed relationships. The unique association between self-compassion and specific CPTSD symptom clusters was further evidenced by the results of the regression analyses. These results revealed that self-judgement and common humanity significantly predicted hypoactive affect dysregulation symptoms, and that self-judgement and isolation significantly predicted negative self-concept symptoms. These results indicate that self-compassion may be a
particularly important construct in predicting DSO symptoms as compared to PTSD symptoms, particularly for symptoms of negative self-concept and affect dysregulation.

Negative self-concept symptoms are central to CPTSD and are defined in terms of persistent beliefs about oneself as diminished, defeated, or worthless and are accompanied by deep and pervasive feelings of shame, guilt, or failure (Maercker et al., 2013). Such beliefs and schemas can make individuals very resistant to standard clinical interventions and it has been argued that such patterns of thinking might be more responsive to compassion focused interventions (Gilbert & Irons, 2014). Our results support these claims and indicate that compassion-focused therapy might be a useful tool to address pervasive beliefs and schemas related to negative self-concept in trauma-exposed persons.

On the basis of previous findings (e.g., Maheux and Price, 2015), it may be considered surprising that self-compassion was not found to be significantly associated with the ICD-11 PTSD symptom clusters. However, previous studies that have reported associations between self-compassion and PTSD were all derived from DSM-based assessments of PTSD. It may be that the association between self-compassion and PTSD symptoms, even including avoidance symptoms, may be mediated by disturbances in self-organization (DSO) symptoms which were not measured in previous studies. In addition, it is important to note that the DSM-IV and DSM-5 PTSD symptom profiles include 11 and 14 additional symptoms, respectively, as compared to the ICD-11’s PTSD symptom profile. Many of the symptoms that comprise the DSM-based models of PTSD are actually included within the ICD-11’s description of CPTSD (e.g., irritability, emotional responsivity, emotional numbing, dissociative experiences, negative self-evaluations, and relational difficulties). As such, current findings may be considered to add meaningfully to the existing literature regarding the association between self-compassion and PTSD. By adopting the ICD-11’s framework for trauma-related psychopathology, we were able to identify that at
Least in this clinical sample, self-compassion is not meaningfully associated with symptoms that are directly tied to one’s traumatic exposure (e.g., re-experiencing, avoidance, hyperarousal), but are meaningfully associated with the symptoms that reflect disturbances in one’s self-organisation, especially relating to emotional hypo-activity, and negative self-concept. By more clearly delineating the relationship between self-compassion and trauma symptoms that was afforded through the use of the ICD-11 framework, the current findings can inform clinicians as to the possible usefulness of compassion-focused interventions when working with trauma-exposed individuals.

Compassion focused strategies are already incorporated in a number of interventions. In Mindfulness-Based Stress Reduction (MBSR), for example, loving-kindness is introduced during an all-day meditation (Kabat-Zinn, 1990) and it has been suggested that this program may be helpful in reducing anger in survivors of childhood sexual abuse (Bowman, 2005). Furthermore, an implicit foundation of compassion underlies a number of contextual behavioral therapies such as Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson, 1999). Building on the work of Paul Gilbert (e.g. Gilbert & Irons, 2014), Deborah Lee (e.g. Lee & James, 2012; Lee 2016) has recently proposed a model of intervention for PTSD based on compassion focused therapy, which may be particularly beneficial for CPTSD. While current findings suggest that inclusion of compassion-focused interventions alongside traditional trauma-focused treatments may be beneficial for the treatment of CPTSD, the effectiveness of such interventions has not been explored as yet and these recommendations should be interpreted cautiously. There is clearly a need for further research on the effectiveness of various interventions for CPTSD that target both the 'core' PTSD symptoms, and the more psychologically pervasive DSO symptoms. There is also a need for dismantling studies to tease out the relative efficacy of different active treatment components for CPTSD.
Although our results indicate that strategies that improve self-compassion may potentially reduce DSO symptoms, the precise mechanisms by which the treatment effects of self-compassion occur remain unknown and should be explored further in future experimental research. It has been argued that self-compassion can increase positive cognitions and decrease avoidance through increased mindfulness, defined as non-judgmental awareness of the present moment. Recent interventions for the treatment of PTSD that have used mindfulness techniques have demonstrated positive findings (Dutton, Bermudez, Matas, Majid, & Myers, 2013; Kearney, McDermott, Malte, Martinez, & Simpson, 2012), which might be attributed to increased self-compassion. However, these interventions have never been tested in CPTSD and therefore future work is necessary to determine the extent and the mechanisms that self-compassion strategies might improve CPTSD symptoms.

There are several limitations in the current study. Analyses were based on correlations and it was not possible to investigate the direction in relationship between observed findings. The analyses were also based on a small clinical sample with severe traumatic symptomatology meaning that there was an increased likelihood of Type 2 errors occurring. Furthermore, the predominately female composition of the sample and high level of exposure to childhood trauma limits the generalizability of findings to the wider trauma population. In addition, self-report assessments rather than clinician-administered interviews were employed in the present study. It is possible that the self-report nature of the data may have biased results and replication with clinician-administered measures would be beneficial to confirm current findings. Finally, there is content overlap in some variables (e.g. self – judgment and negative self-concept) potentially inflating the magnitude of association. However, there are some differences that suggest that these are tapping into different types of self-evaluation. The SCS asks participants to respond to the items based on “How I typically act towards myself in difficult times”, and uses a ‘Never’ – ‘Always’ response format. In contrast, the
ITQ asks respondents “The questions refer to ways you typically feel, ways you typically think about yourself and ways you typically relate to others” as a result of having experienced a traumatic stressor using a ‘Not at all’ – ‘Extremely’ response format. Furthermore, the magnitude of associations between SCS and ITQ reported in table 1 are very reassuring and they are not denoting significant overlap between these two scales. Notwithstanding its limitations this is the first study to explore the association between self-compassion and ICD-11 CPTSD and our results suggest that cultivating a self-compassion attitude during therapy may be useful in the treatment of CPTSD and particularly for symptoms of negative self-concept and affect dysregulation.
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Ethical Statement

The study was reviewed by the South East Scotland Research Ethics Committee.

Conflict of Interest

All authors have no conflict of interest with respect to this publication.

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